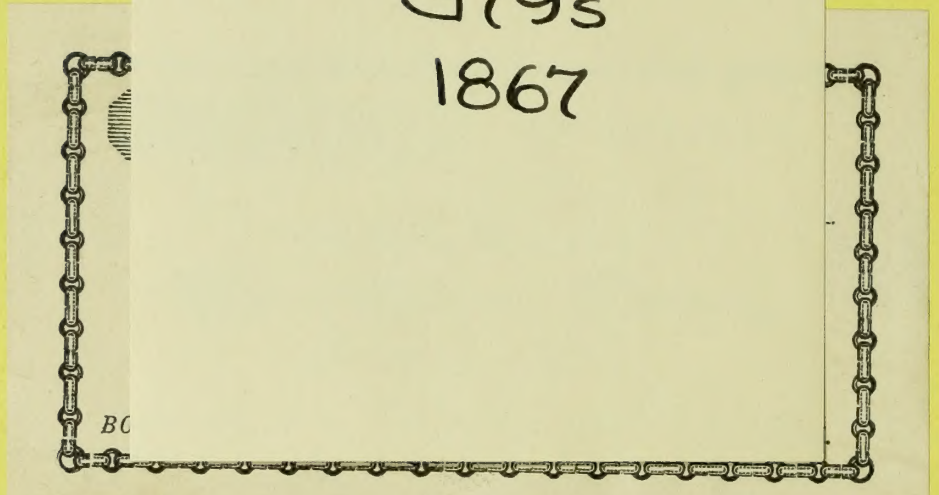
THE UNIVERSITY
OF ILLINOIS
LIBRARY
608
G79s
1867



Digitized by the Internet Archive
in 2015

https://archive.org/details/subjectmatterind1867grea

SUBJECT-MATTER INDEX

OF

PATENTS APPLIED FOR AND PATENTS GRANTED

FOR THE YEAR 1867.

15 & 16 VICTORIÆ, Cap. 83. Sec. XXXII.

SUBJECT-MATTER INDEX

OF

PATENTS APPLIED FOR AND PATENTS GRANTED,

For the Year 1867.

Printed and Published by Order of the Commissioners of Patents

UNDER THE

ACT of 15 & 16 VICTORIÆ, Cap. 83. Sec. XXXII.

BY BENNET WOODCROFT,

CLERK OF THE COMMISSIONERS OF PATENTS.

LONDON:

PRINTED BY GEORGE EDWARD EYRE AND WILLIAM SPOTTISWOODE,

PRINTERS TO THE QUEEN'S MOST EXCELLENT MAJESTY.

PUBLISHED AT THE OFFICE OF THE COMMISSIONERS OF PATENTS FOR INVENTIONS,

SOUTHAMPTON BUILDINGS, HOLBORN.

1869.

[Price 25*s.*]

608
G79s
1867
13 Feb 34 Hensel

KEY OF TERMS AND PHRASES IN TITLES, &c.

	Page
Abacus or apparatus for teaching arithmetic—(*see calculating*)	62
Abdominal truss supports — (*see surgery*)	449
Accidents (prevention of)	1
Account books — (*see books*)	35
Accumulating and storing power—(*see motive-power*)	290
Acids and vinegar	6
Acoustic pulpits — (*see furniture*)	179
Actuating or working machinery — (*see propelling*)	355
Actuating railway points — (*see railways*)	374
Actuating ships' propellers — (*see propelling*)	350
Actuating signals — (*see signals*)	400
Adapting shoes to horses' feet — (*see horse shoes*)	227
Address cards — (*see cards*)	64
Address cards and advertisements,–delivering and distributing — (*see advertising*)	7
Addressing machines for printing names — (*see printing*)	344
Adhering designs or ornaments to fabrics — (*see cemented fabrics*)	80
Adhesion of sediment,–preventing the — (*see oxidation*)	306
Adjustments and guides for machinery— (*see propelling*)	355
Administrative telegraphy — (*see signals*)	400
Admitting air in manufacturing processes — (*see air-supplying*)	17
Admitting air to furnaces, stoves and burners — (*see air-supplying*)	11
Advertising	7
Aërated bread — (*see bread*)	47
Aërating; aërated liquids; carburetting air and gas	7
Aërial machines, aërostation, balloons	8
Aft and fore sails for ships—(*see ships' rigging*)	395
Ageing alcoholic spirits — (*see distilling*)	115
Ageing and refining wines — (*see brewing*)	50
Agitating and stirring — (*see mixing*)	279
Agricultural drains — (*see drains*)	121
Agricultural fecundating agents — (*see manure*)	247
Agricultural implements for cultivation of land — (*see ploughing*)	334
Air, gas and wind engines and mills; pneumatic motive-power	9
Air and gas,–carburetting — (*see aërating*)	7
Air-proof and waterproof fabrics — (*see waterproof*)	479
Air-pumps, bellows and fan blowers — (*see air-supplying*)	17
Air-supplying, blowing, exhausting; draft and ventilation	11
Alarms and signals — (*see signals*)	400
Albums — (*see books*)	35
Alcoholic distillation, production of alcohol — (*see distilling*)	115
Alcoholmeters — (*see thermometers*)	455
Alizarine — (*see dyes*)	128
Alkalies; alkaline and earthy salts; salts of alumina; baryta, iodine and compounds	24
Allowing the escape of superfluous carbon from casks — (*see casks*)	72
Alloys, alloying metals, — (*see metals*)	256
Alumina and salts of alumina — (*see alkalies*)	24
Amalgamation of animal with vegetable food — (*see preserving food*)	337
Ammonia and salts of ammonia—(*see alkalies*)	24
Ammunition or cartridges — (*see cartridges*)	69
Ammunition or gunpowder — (*see gunpowder*)	203
Ammunition or shot — (*see shot*)	397
Anatomical and surgical processes — (*see surgery*)	449
Anchors, lowering anchors	26
Anchors for steam ploughs — (*see ploughing*)	334
Angle iron, T iron — (*see nails*)	293
Anhydrous liquid ammonia — (*see alkalies*)	24
Aniline colours — (*see dyes*)	128
Animal diseases,–cure of — (*see medical treatment*)	253
Animal fibres — (*see fibres*)	144
Animal food,–preserving and preparing — (*see preserving food*)	337
Animal oils — (*see oils from seeds*)	299
Animal size— (*see starch*)	427
Annealing glass — (*see glass*)	191
Annealing metals — (*see metals*)	256
Anti-corrosive compositions — (*see oxidation*)	306
Anti-friction journal boxes or bearings — (*see axles*)	23
Anti-friction rollers and drums—(*see cylinders*)	27
Anvils and smiths' hearths — (*see metals*)	109
Apparel worn by ladies — (*see petticoats*)	265
Appendages for use in surgery — (*see surgery*)	319
Appliances for serving mustard — (*see plates*)	449
Application of manures to land — (*see sowing*)	333
Applications of electricity — (*see electricity*)	412
Applications of glass — (*see glass*)	131
Applications of gutta-percha and india-rubber —(*see gutta-percha as applied*)	191
Applying bronze powders to fabrics — (*see cemented fabrics*)	204
Applying metals or cements to fabrics — (*see cemented fabrics*)	80
Applying teeth to saws — (*see cutting*)	80
Appointment indicators — (*see measuring length*)	104
Aqueducts and viaducts — (*see bridges*)	250
Arches of bridges — (*see bridges*)	54
Architectural mouldings and decorations — (*see mouldings*)	54
Architecture — (*see building*)	291
Architecture of ships — (*see ship-building*)	57
"Argand" burners — (*see gas-burners*)	390
Argentiferous ores — (*see metals*)	186
Arithmetic,–abacus or apparatus for teaching — (*see calculating*)	256
Arming presses — (*see presses*)	62
	339

855494

	Page
Armour plated batteries — (*see fortifications*)	165
Armour plating ships — (*see coating*)	93
Arms or weapons — (*see fire-arms*)	153
Arrangements for propelling ships — (*see propelling*)	350
Arranging and setting up pumps — (*see pumps*)	365
Arranging or composing type — (*see printing*)	344
Arranging or packing goods — (*see presses*)	339
Articles made of gutta-percha or india-rubber — (*see gutta-percha as applied*)	204
Articles of cutlery — (*see knives*)	236
Articles of food,–preserving and preparing — (*see preserving food*)	337
Articles of jewellery — (*see jewellery*)	230
Articles of ladies' wearing apparel — (*see petticoats*)	319
Articles of men's wearing-apparel — (*see wearing-apparel*)	483
Articles of paper — (*see paper*)	311
Articulated artificial legs — (*see surgery*)	449
Artificial flowers and foliage — (*see feathers*)	142
Artificial fuel — (*see fuel*)	167
Artificial hair — (*see hair-dressing*)	209
Artificial ice — (*see condensing*)	98
Artificial india-rubber and gutta-percha — (*see gutta-percha, treating*)	204
Artificial leather — (*see leather*)	243
Artificial light — (*see lamps*)	237
Artificial limbs for the human body — (*see surgery*)	449
Artificial manures — (*see manure*)	247
Artificial pearls or beads — (*see bones*)	35
Artificial plumbago — (*see metallic salts*)	255
Artificial stone and marble — (*see stone*)	443
Artificial teeth — (*see dentistry*)	113
Ascending and descending mine shafts — (*see mining*)	275
Ascertaining temperature — (*see thermometers*)	455
Ascertaining the speed of stationary machines — (*see governors*)	194
Assisting swimming — (*see buoys*)	60
Assorting semolina — (*see thrashing*)	456
Astronomical instruments — (*see compasses*)	97
Athletic exercises — (*see games*)	182
Atmospheric air and gas,–carburetting — (*see aërating*)	7
Atmospheric changes,–indicating — (*see thermometers*)	455
Atmospheric railways — (*see railways*)	372
Attaching shoes to horses' feet — (*see horse shoes*)	227
Attaching teeth to saws — (*see cutting*)	104
Attenuating effects of shocks or concussions — (*see accidents*)	1
Augers — (*see boring*)	39
Automatic apparatus for ventilating — (*see ventilating*)	470
Automatic floats or gauges — (*see guages*)	190
Automatic governors — (*see governors*)	194
Automaton toys and hobby horses — (*see toys*)	460
Awnings, carriage and waggon covers — (*see oil-cloths*)	296
Axles, shafts, bearings, journals, axle-boxes, packings for axles, lubricating axles, &c.	27
Backs and handles for brushes — (*see brushes*)	56
Bacon curing — (*see preserving food*)	337
Bags, baskets, sacks, holders and fasteners	30
Bags for coffee pots — (*see coffee*)	96
Baking bread, biscuits and pastry — (*see bread*)	47
Balance bridges — (*see bridges*)	54
Balances or weighing machines — (*see weighing*)	496
Balconies and staircases — (*see building*)	57
Bale ties or hoop iron — (*see chains*)	81
Baling or packing goods — (*see presses*)	339
Ball cartridges — (*see cartridges*)	69
Ball or supply valves — (*see valves*)	464
Ballasting ships — (*see ship-building*)	390
Balling thread — (*see winding*)	500
Balloons — (*see aërial machines*)	8
Balls and shot — (*see shot*)	397
Balls for croquêt — (*see games*)	182
Bandages and splints used in surgical operations — (*see surgery*)	449
Banding, twine and cord — (*see ropes*)	384
"Banding" for driving spindles—(*see straps*)	445
Bands and girths — (*see belts*)	33
Bands or hoops,–metallic — (*see chains*)	81
Bands or ties for bales — (*see presses*)	339
Bank notes and cheques — (*see cheques*)	84
Bank vaults — (*see building*)	57
Bar and rod iron — (*see metals*)	265
Barges — (*see ship-building*)	390
Barium — (*see metals*)	256
Barley and rice,–husking — (*see thrashing*)	456
Barm or yeast — (*see brewing*)	50
Barometers — (*see thermometers*)	455
Barouches and landaus — (*see carriages*)	64
Barrels, rollers and cylinders — (*see cylinders*)	109
Barrels and casks — (*see casks*)	72
Barrels for guns and fire-arms—(*see fire-arms*)	153
Bars for ranges — (*see fire-places*)	160
Basins and baths — (*see baths*)	31
Basins and harbours — (*see docks*)	117
Baskets — (*see bags*)	30
Bassoons and oboes — (*see musical instruments*)	292
Basting and stitching — (*see sewing*)	386
Batching or treating jute — (*see spinning*)	413
Baths and basins, bathing appliances	31
Batteries and fortifications — (*see fortifications*)	165
Bayonets and sabres	32
Beacons and buoys — (*see buoys*)	60
Beads and pearls,–artificial — (*see bones*)	35
Beaming warps — (*see weaving*)	484
Beams and girders used in building — (*see building*)	57
Beams for weighing purposes — (*see weighing*)	496
Beams or rollers — (*see cylinders*)	109
Bearings, journals and axles — (*see axles*)	27
Beaters for thrashing machines — (*see thrashing*)	456
Beating eggs — (*see preserving food*)	337
Beating rags — (*see rags*)	370
Bedding and adjusting railway sleepers — (*see railways*)	372
Beds and mattresses — (*see upholstery*)	462
Beds for guns — (*see fire-arms*)	153

	Page
Bedsteads, bedstead bottoms — (*see furniture*)	179
Beehives	32
Beer and other malt liquors — (*see brewing*)	50
Beer casks — (*see casks*)	72
Beer engines or pumps — (*see pumps*)	365
Beetling woven fabrics — (*see finishing*)	150
Beetroot juice for making sugar — (*see sugar*)	446
Bellows and fan blowers — (*see air-supplying*)	17
Bells; ringing bells	32
Belts, braces, girths and bands	33
Belts for driving machinery — (*see straps*)	445
Bench planing machines — (*see cutting*)	104
Bench vices, bench-dogs or hooks — (*see vices*)	473
Benches and desks — (*see furniture*)	179
Bending and shaping metals — (*see metals*)	265
Bending wood — (*see wood*)	507
Beton — (*see stone*)	443
Beverages or drinks — (*see brewing*)	50
"Bib" stop-cocks — (*see valves*)	464
Bicarbonate of potash and soda — (*see alkalies*)	24
Billiards, billiard tables — (*see games*)	182
Bills of exchange — (*see cheques*)	84
Binders for papers — (*see files and clips*)	148
Binding, binders for sewing-machines — (*see sewing*)	386
Binding books — (*see books*)	35
Biscuits and pastry — (*see bread*)	47
Bits for horses — (*see harness*)	211
Bituminous distillation — (*see distilling*)	116
Bituminous oils — (*see oils of tar*)	301
Black alkaline liquor — (*see alkalies*)	24
Blacking for metal founding — (*see casting metals*)	74
Blankets — (*see fabrics*)	140
Blankets used in printing — (*see printing*)	344
Blanks for files — (*see files and rasps*)	148
Blast or air to furnaces,–supplying — (*see air-supplying*)	11
Blasting stone or rock — (*see mining*)	275
Bleaching and decolourising	33
Bleeding of wounds,–stopping the — (*see surgery*)	449
Blight in plants,–preventing and checking — (*see horticulture*)	228
Blind cords,–manufacture of — (*see weaving*)	492
Blinds, blind cords — (*see window-blinds*)	502
Blocking hats — (*see hats*)	212
Blocks for buffers — (*see breaks*)	48
Blocks of artificial stone — (*see stone*)	443
Blocks of dwelling houses — (*see building*)	57
Blocks or surfaces for printing—(*see printing*)	344
Blocks used for filtering — (*see filtering*)	140
Blocks used for paving — (*see paving*)	316
Blocks used in building — (*see bricks*)	53
Blocks used with ships' rigging — (*see ships' rigging*)	395
Blotting pads — (*see books*)	35
Blotting paper — (*see paper*)	311
Blowers for furnaces, blowing-engines — (*see air-supplying*)	11
Blowing glass — (*see glass*)	191
Blows, jerks and strains,–preventing — (*see accidents*)	1
Boards for advertising — (*see advertising*)	7
Boat building and repairing — (*see ship-building*)	390
Boat propulsion — (*see propelling*)	350
Bobbin net or twist lace machines — (*see weaving*)	490
Bobbins and cop tubes	34
Bodices — (*see petticoats*)	319
Bodies for hats — (*see hats*)	212
Boiler feeding apparatus — (*see steam-boilers*)	434
Boiler furnaces — (*see furnaces*)	171
Boilers for steam-engines, boiling liquids — (*see steam-boilers*)	427
Boiling eggs — (*see cooking*)	102
Bolsters for spinning machines — (*see spinning*)	417
Bolts, nails and rivets — (*see nails*)	293
Bolts for doors — (*see locks*)	245
Bones, ivory, horn, pearl and substitutes; artificial pearls and beads	35
Bonnets and ladies' caps — (*see hats*)	212
Books, albums, portfolios, book covers, book slides or holders, book-binding	35
Boot webs,–manufacture of — (*see weaving*)	492
Boots, shoes, leggings, skates; cleaning boots	37
Boring, drilling, rifling and punching; gimlets, augers and bracebits	39
Bottles and jars; stoppers, capsules and corks; stoppering, closing and opening bottles and jars; cork screws; bottle holders	42
Bottoms for beds, mattresses — (*see upholstery*)	462
Bottoms for bedsteads — (*see furniture*)	179
Bowls, cups and saucers — (*see plates*)	333
Bowls and jugs — (*see earthenware*)	129
Bows and neck ties — (*see shirts*)	396
Box irons, smoothing irons — (*see mangling*)	246
Box pickers for looms — (*see weaving*)	494
Boxes, trunks, portmanteaus, letter-boxes, work-boxes, dressing-cases, canisters	45
Boxes or bearings of axles — (*see axles*)	27
Boxings of windows and shutters — (*see windows*)	503
Brace fabric,–manufacture of — (*see weaving*)	492
Bracebits — (*see boring*)	39
Bracelets — (*see jewellery*)	230
Braces, belts, straps or bands — (*see belts*)	33
Brackets — (*see nails*)	293
Brackets for supporting shelves in shop windows — (*see show-cases*)	398
Braid and braided fabrics,–production of — (*see weaving*)	492
Braiders or embroidering apparatus — (*see sewing*)	386
Brattice cloths for collieries — (*see mining*)	275
Brazing — (*see metals*)	271
Bread, biscuits and pastry; bakers' ovens	47
Breaking and cleaning fibres for spinning — (*see spinning*)	413
Breaking coal for fuel — (*see fuel*)	167
Breaking stones, ores and minerals — (*see grinding minerals*)	199
Breaks, skids and buffers for carriages and railways	48
Breaks for stationary machinery— (*see governors*)	194
Breast exhausters — (*see surgery*)	449

	Page
Breech-loading fire-arms — (*see fire-arms*)	153
Brewing, fermenting, making fermented and unfermented beverages; treating malt and hops	50
Bricklayers' trowels — (*see hammers*)	210
Bricks, tiles and building blocks	53
Bridges, viaducts and aqueducts	54
Bridles and bridle bits — (*see harness*)	211
Brims for hats — (*see hats*)	212
Brine — (*see salt*)	386
Bristles for making brushes — (*see brushes*)	56
Broadsides of ships— (*see ship-building*)	390
Bronzing metallic surfaces — (*see metals*)	271
Bronzing surfaces of fabrics — (*see cemented fabrics*)	80
Brooches and brooch fastenings—(*see jewellery*)	230
Brooms and brushes — (*see brushes*)	56
Brushes and brooms; brushing and waxing apartments	56
Brushing boots and shoes — (*see boots*)	37
Brushing hair— (*see hair-dressing*)	209
Buckets and tubs — (*see cisterns*)	86
Buckets for pumps — (*see pumps*)	365
Buckles and buttons — (*see buttons*)	62
Buffalo horn — (*see bones*)	35
Buffers and breaks — (*see breaks*)	48
Building, plastering, flooring and roofing; walls, ceilings and cornices; ladders and building stages	57
Building blocks and bricks — (*see bricks*)	53
Building bridges — (*see bridges*)	54
Building or forming cops — (*see spinning*)	417
Building ships, boats and other vessels — (*see ship-building*)	390
Bullets and cannon balls — (*see shot*)	397
Bullion boxes — (*see coins*)	97
Bunches of cigars,–shaping and pressing — (*see tobacco*)	459
Buoys, marine lights; preserving life and property at sea, conveying lines to stranded vessels; swimming, imparting buoyancy	60
Burglar-proof safes — (*see locks*)	245
Burners for gas — (*see gas-burners*)	186
Burning bricks and tiles — (*see bricks*)	53
Burning limestone — (*see cement*)	79
Burning petroleum and gas tar as fuel — (*see fuel*)	167
Burning smoke — (*see smoke*)	406
Burnishing or polishing surfaces — (*see grinding, sharpening*)	201
Burring wool for spinning — (*see spinning*)	413
Bursting of boilers,–preventing the — (*see accidents*)	1
Bursting of pipes,–preventing the — (*see pipes*)	326
Busks for stays — (*see petticoats*)	319
Busts, figures and vases — (*see pillars*)	324
Butter — (*see churns*)	85
Butter holders or dishes — (*see plates*)	333
Button-hole sewing-machines — (*see sewing*)	386
Buttons, buckles, studs, sleeve links and other dress fastenings	62
Cables and cordage — (*see ropes*)	384
Cables for electric telegraphs — (*see wire*)	505
Cabs and omnibuses — (*see carriages*)	64
Caddies and tea chests — (*see coffee*)	96
Cages used in mining operations — (*see mining*)	275
Caissons — (*see docks*)	117
Cakes and biscuits — (*see bread*)	47
Calcining limestone — (*see cement*)	79
Calcining ores and metals — (*see metals*)	256
Calcium — (*see metals*)	256
Calculating, teaching, giving answers to questions	62
Calico printing — (*see printing*)	344
Call bells — (*see bells*)	32
Cameras, camera obscura — (*see optical instruments*)	303
"Campbell's" addressing machines — (*see printing*)	344
Camphor	63
Cams — (*see wheels for machinery*)	498
Canals, canal locks — (*see docks*)	117
Cancelling or obliterating stamps — (*see stamps*)	425
Candles, tapers and wicks	63
Candlesticks, candelabra — (*see lamps*)	237
Cane juice — (*see sugar*)	446
Canisters — (*see boxes*)	45
Cannons and guns — (*see fire-arms*)	153
Cans for holding milk — (*see churns*)	85
Caoutchouc,–preparing and vulcanizing — (*see gutta-percha, treating*)	204
Caoutchouc as applied in various manufactures — (*see gutta-percha as applied*)	204
Cap for upholstery springs — (*see upholstery*)	462
Caps and hats — (*see hats*)	212
Caps for spinning — (*see spinning*)	417
Caps for springs — (*see springs*)	423
Caps for telegraphic insulators — (*see telegraphs*)	451
Caps or chimney tops — (*see flues*)	163
Capstans and hoists — (*see hoists*)	223
Capsules or covers for bottles — (*see bottles*)	42
Capturing fish — (*see fishing*)	162
Carbon — (*see charcoal*)	83
Carbonates of soda and potash — (*see alkalies*)	24
Carbonic acid gas — (*see aërating*)	7
Carburetting gas and air — (*see aërating*)	7
Cardboard — (*see paper*)	311
Carding and combing fibrous materials — (*see spinning*)	416
Cards, tablets and card cases	64
Carpet looms, weaving carpets — (*see weaving*)	490
Carpet stretchers, carpet cleaners — (*see upholstery*)	462
Carriage breaks — (*see breaks*)	48
Carriage propulsion — (*see propelling*)	353
Carriage rugs — (*see upholstery*)	462
Carriage ways and foot paths — (*see paving*)	316
Carriage windows — (*see windows*)	503
Carriages, cabs, omnibuses, waggons, carts, trucks, velocipedes; loading and tipping carts, &c.	64
Carriers and carriages in spinning machinery (*see spinning*)	417
Carrying passengers through the air — (*see aërial machines*)	8
Carrying umbrellas,–apparatus for — (*see umbrellas*)	461
Cars and cabs — (*see carriages*)	64

	Page
Cart and waggon covers — (*see oil-cloths*)	296
Cartridge paper — (*see paper*)	311
Cartridges and cases	69
Carvings in wood — (*see wood*)	507
Casements and window-sashes — (*see windows*)	503
Cases for bottles — (*see bottles*)	42
Cases for cartridges — (*see cartridges*)	69
Cases for clocks — (*see clocks*)	88
Cases for hats and bonnets — (*see hats*)	212
Cases for holding cards — (*see cards*)	64
Cases for umbrellas — (*see umbrellas*)	461
Cases of surgical instruments — (*see surgery*)	449
Caskets for jewellery — (*see jewellery*)	230
Casks and barrels; cask stands, bungs, tilting casks	72
Casting and moulding metals; manufacture of castings	74
Casting and moulding plastic materials; manufacture of moulded articles; plastic compositions; moulding fuel	77
Casting glass — (*see glass*)	191
Castors for containing condiments — (*see plates*)	333
Castors for furniture — (*see furniture*)	179
Casualties and collisions,–preventing — (*see accidents*)	1
Catches or staples for locks — (*see locks*)	245
Catching fish — (*see fishing*)	162
Cattle diseases,–cure of — (*see medical treatment*)	253
Cattle food — (*see food for cattle*)	164
Cattle pens — (*see stables*)	424
Causing bottom heat to plants — (*see horticulture*)	228
Caustic alkaline leys — (*see alkalies*)	24
Ceilings and cornices — (*see building*)	57
Cells for galvanic batteries — (*see electricity*)	131
Cement and plaster; burning lime	79
Cementation of metals — (*see metals*)	256
Cemented and flocked fabrics; adhering ornaments and depositing metal on fabrics or yarns	80
Central fire breech-loading fire-arms — (*see fire-arms*)	153
Central fire cartridges — (*see cartridges*)	69
Centrifugal action cylinders — (*see cylinders*)	109
Centrifugal machines or hydro-extractors — (*see drying*)	123
Ceramic ware — (*see earthenware*)	129
Cereals,–decorticating — (*see thrashing*)	456
Chaff cutting — (*see food for cattle*)	164
Chain beaming apparatus — (*see weaving*)	484
Chain tappets — (*see weaving*)	485
Chains; chain cables; hooks, hoops, rings	81
Chairs and sleepers for railways—(*see railways*)	372
Chairs and tables — (*see furniture*)	179
Chandeliers — (*see lamps*)	237
Changes in the atmosphere,–indicating — (*see thermometers*)	455
Characters used when sending telegraphic messages — (*see telegraphs*)	451
Charcoal, coke, carbon, moulders' blacking, lamp black	83
Charging and emptying retorts — (*see retorts*)	382
"Chases" used in printing — (*see printing*)	344
Chasing and engraving — (*see engraving*)	135
Checking and guiding horses — (*see harness*)	211
Checking blight in plants — (*see horticulture*)	228
Checking motion in carriages and locomotives — (*see breaks*)	48
Checks against explosions — (*see accidents*)	1
Cheese and cheese boxes — (*see churns*)	85
Chenille	84
Cheques, bills and receipts	84
Cheroots, cigars and cigarettes — (*see tobacco*)	459
Chess, chess boards — (*see games*)	182
Chimney-pieces — (*see mantel-pieces*)	247
Chimneys and flues — (*see flues*)	163
China and porcelain — (*see earthenware*)	129
China grass,–preparing and spinning — (*see spinning*)	416
Chlorine and chlorides	85
Chocolate and cocoa — (*see coffee*)	96
Chopping out or thinning turnips — (*see ploughing*)	334
"Chromo-eidotrope" — (*see optical instruments*)	303
Chronometers — (*see clocks*)	88
Chucks for holding drills or boring tools — (*see boring*)	39
Churns, milk cans; making cheese and butter	85
Cider and perry — (*see brewing*)	50
Cigar and pipe lights — (*see matches*)	249
Cigars, cigarettes and cigar holders — (*see tobacco*)	459
Cinder shovels — (*see fireplaces*)	160
Cinder sifters — (*see sifting*)	399
Circular knitting frames — (*see weaving*)	490
Circular saws, saw benches — (*see cutting*)	104
Circular webbing or gasket,–manufacture of — (*see weaving*)	492
Cisterns, reservoirs, tanks and buckets	86
City water supply — (*see watering*)	477
Clack and bucket door pieces for pumps — (*see pumps*)	365
Clamps used in making matches — (*see matches*)	249
Clarifying sugar — (*see sugar*)	446
Clarionets, oboes and bassoons — (*see musical instruments*)	292
Clasps or fastenings for bags — (*see bags*)	30
Classifying and sorting — (*see sifting*)	399
Clay,–grinding — (*see grinding minerals*)	199
Clay for making bricks — (*see bricks*)	53
Clay used in pottery ware — (*see earthenware*)	129
Cleaning boots and shoes — (*see boots*)	37
Cleaning bottles — (*see bottles*)	42
Cleaning currants and raisins — (*see preserving food*)	337
Cleaning grain, seeds and rice — (*see thrashing*)	456
Cleaning knives, forks and spoons — (*see knives*)	236
Cleaning marble — (*see stone*)	443
Cleaning tubes and pipes — (*see pipes*)	326
Cleaning waste — (*see rags*)	370
Cleaning windows — (*see windows*)	503
Cleansing and sweeping streets and roads — (*see paving*)	316
Cleansing and washing fabrics, yarns and materials — (*see washing*)	473
Cleansing beds of rivers — (*see excavating*)	137
Cleansing casks — (*see casks*)	72

	Page
Cleansing fibres — (*see fibres*)	144
Cleansing ships' bottoms — (*see ship-building*)	390
Cleansing steam-boilers — (*see steam-boilers*)	433
Clearing or grubbing-up uncultivated land — (*see ploughing*)	334
Climbing plants,–apparatus for training — (*see horticulture*)	228
Clip pulleys — (*see wheels for machinery*)	498
Clipping or cutting — (*see cutting*)	104
Clipping or shearing horses — (*see shearing*)	389
Clips and files — (*see files and clips*)	148
Cloaks for ladies' wear — (*see petticoats*)	319
Clocks, watches and other timekeepers; watch keys, chains and guards	88
Close fire ranges or kitcheners—(*see fire-places*)	160
Closed tubes — (*see pipes*)	326
Closing and fastening port lights — (*see lamps*)	237
Closing cartridges — (*see cartridges*)	69
Closing doors and gates — (*see doors*)	119
Closing windows and shutters — (*see windows*)	503
Clothes lines — (*see drying*)	123
Clothing for men's wear — (*see wearing-apparel*)	483
Cloths or woven fabrics,–finishing — (*see finishing*)	150
Coach lace,–manufacture of — (*see weaving*)	492
Coaches and cabs — (*see carriages*)	64
Coal,–screening and preparing for fuel — (*see fuel*)	167
Coal mining — (*see mining*)	275
Coast harbours — (*see docks*)	117
Coating, covering, plating, sheathing	90
Coating metals with metals — (*see metals*)	271
Coats and trousers — (*see wearing-apparel*)	483
Cobalt — (*see metals*)	256
Cocks and taps — (*see valves*)	464
Cocoa and chocolate — (*see coffee*)	96
Coffee, cocoa and tea; coffee-pots and tea-pots, tea caddies, tea chests	96
Coffer dams for bridge building — (*see bridges*)	54
Coffins, tombstones, embalming	96
Cog wheels — (*see wheels for machinery*)	498
Coiling ropes, lines and cord — (*see ropes*)	384
Coins and medals; bullion boxes	97
Coke — (*see charcoal*)	83
Collapsing windows —(*see windows*)	503
Collars for gentlemen's wear — (*see shirts*)	396
Collars for horses — (*see harness*)	211
Collars for ladies' wear — (*see petticoats*)	319
Collecting grasses or corn — (*see reaping*)	381
Collieries, waggons for collieries — (*see mining*)	275
Collisions and casualties,–preventing — (*see accidents*)	1
Colouring and dyeing matters — (*see dyes*)	128
Colouring and painting, colours and paints — (*see painting*)	308
Colouring or dyeing — (*see dyeing*)	126
Colouring tobacco pipes — (*see tobacco*)	459
Columns and pillars — (*see pillars*)	324
Combination of animal with vegetable food — (*see preserving food*)	337
Combing and carding fibrous materials — (*see spinning*)	416
Combing hair — (*see hair-dressing*)	209
Combs	97
Combs or wraiths for warping and beaming frames — (*see weaving*)	484
Combustible gases — (*see gas*)	183
Commercial or appointment indicators — (*see measuring length*)	250
Commodes — (*see water-closets*)	476
Communicating apparatus and signals — (*see signals*)	400
Communicating motion to machinery — (*see propelling*)	355
Communications received by electric telegraphs — (*see telegraphs*)	451
"Commutators" for electric telegraphs — (*see telegraphs*)	451
Compasses; measuring angles; surveying and levelling; mathematical and astronomical instruments; ascertaining longitude	97
Composing or arranging type — (*see printing*)	344
Composite metals — (*see metals*)	256
Compositions for bleaching — (*see bleaching*)	33
Compositions of plastic materials — (*see casting plastic*)	77
Compositions used for coating ships' bottoms — (*see coating*)	93
Composts or artificial manures — (*see manure*)	247
Compounding metals, metallic compounds — (*see metals*)	256
Compounds for lubricating — (*see oiling*)	297
Compounds or soaps for washing — (*see soap*)	411
Compounds used for igniting fires — (*see fuel*)	167
Compounds used in finishing fabrics and yarns — (*see finishing*)	150
Compressing and packing — (*see presses*)	339
Concrete or artificial stone — (*see stone*)	443
Condensing, cooling, freezing	98
Condensing carding-engines — (*see spinning*)	416
Condensing smoke — (*see smoke*)	406
Condensing steam-engines — (*see steam-engines*)	436
Conductors for electric telegraphs — (*see telegraphs*)	451
Conductors of lightning — (*see electricity*)	131
Confectionery	101
Conservatories — (*see horticulture*)	228
Consumption of smoke — (*see smoke*)	406
Controlling railway points — (*see railways*)	374
Conversion of iron into blooms— (*see metals*)	256
Converting into gas — (*see gas*)	183
Conveying motions to machinery — (*see propelling*)	354
Conveying salt-water fish overland, &c. — (*see fishing*)	162
Conveying sound from speakers to audience — (*see signals*)	400
Cooking and apparatus used in cooking	102
Cooling and freezing — (*see condensing*)	98
Cop forming machinery — (*see spinning*)	417
Cop tubes — (*see bobbins*)	34
Copings — (*see building*)	57
Copper — (*see metals*)	256
Copper-plate printing — (*see printing*)	344
Coprolites — (*see manure*)	247
Copying, tracing, drawing and writing	103
Cordage and twine — (*see ropes*)	384
Cords for window-blinds — (*see window-blinds*)	502

	Page
Cords or ropes of wire — (*see wire*)	505
Corduroy and fustians,–cutting — (*see finishing*)	150
Cores and sockets used in casting metals — (*see casting metals*)	74
"Coribou" — (*see leather*)	243
Cork; corks and bungs	104
Corking bottles, cork screws — (*see bottles*)	42
Corn grinding, crushing and decorticating — (*see grinding corn*)	198
Corn harvesters — (*see reaping*)	381
Corn meters or measures — (*see measuring length*)	250
Corn thrashing and hulling machines — (*see thrashing*)	456
Cornice poles — (*see upholstery*)	462
Cornices and ceilings — (*see building*)	57
Cornish steam-boilers — (*see steam-boilers*)	427
Corrosion or oxidation,–preventing and removing — (*see oxidation*)	306
Corrugating sheets of metals — (*see metals*)	265
Corsets and stays — (*see petticoats*)	319
Cots and cradles — (*see furniture*)	179
Cotton,–carding, spinning and doubling — (*see spinning*)	417
Cotton bale ties — (*see presses*)	339
Cotton gins — (*see fibres*)	144
Cotton seed oil — (*see oils from seeds*)	299
Couches or sofas — (*see furniture*)	179
Counter-check books — (*see books*)	35
Counters for shops — (*see show-cases*)	398
Countersunk holes,–cutting — (*see boring*)	39
Counting and controlling tap or cock — (*see valves*)	464
Counting apparatus or turnstiles — (*see measuring progress*)	252
Counting or calculating apparatus — (*see calculating*)	62
Coupling or joining, joints and hinges — (*see joining*)	231
Cover or cushion for horse-shoes — (*see horse-shoes*)	227
Covering books, book covers — (*see books*)	35
Covering buildings with slate — (*see building*)	57
Covering floors, floor cloths — (*see oil-cloths*)	296
Covering metallic surfaces with other substances — (*see coating*)	90
Covering metals with metals — (*see metals*)	271
Covering non-metallic substances — (*see coating*)	92
Coverings for the feet — (*see boots*)	37
Covers for carriages and waggons — (*see oil-cloths*)	296
Covers for dishes — (*see plates*)	333
Covers for furniture — (*see furniture*)	179
Covers for hats, coverings for the head — (*see hats*)	212
Covers for jars and bottles — (*see bottles*)	42
Covers for preserves — (*see preserving food*)	337
Covers for umbrellas — (*see umbrellas*)	461
Covers or wrappers for packages — (*see presses*)	339
Cowhouse fittings — (*see stables*)	424
Cowls or guards for chimney shafts — (*see flues*)	163
Crabs and cranes — (*see hoists*)	223
Cradles and nursing apparatus — (*see furniture*)	179
Cramping in forming floors — (*see building*)	57
Cramps and cramping apparatus — (*see vices*)	473
Cranes and capstans — (*see hoists*)	223
Cranked axles and shafts — (*see axles*)	27
Cranks and crank axles — (*see propelling*)	355
Creams, iced creams — (*see confectionery*)	101
Cribbage boards — (*see games*)	182
Crinolines, crinoline skirts — (*see petticoats*)	319
Croquet, croquet balls and mallets — (*see games*)	182
Cross heads of steam-engines — (*see steam-engines*)	436
Cross rolling of metals — (*see metals*)	265
Crossings and turntables for railways — (*see railways*)	374
Crucibles — (*see retorts*)	382
Crude metals,–treatment of — (*see metals*)	256
Cruet-frames — (*see plates*)	333
Crushing corn and seeds — (*see grinding corn*)	198
Crushing minerals — (*see grinding minerals*)	199
Crystal or glass — (*see glass*)	191
Cucumber boxes — (*see horticulture*)	228
Cues for propelling balls — (*see games*)	182
Cuffs and collars for gentlemen's wear — (*see shirts*)	396
Cuffs and collars for ladies' wear — (*see petticoats*)	319
Culinary utensils — (*see cooking*)	102
Cultivation of land — (*see ploughing*)	334
Cupolas or blast furnaces — (*see furnaces*)	171
Cupreous ores — (*see metals*)	256
Cups and saucers — (*see plates*)	333
Curative agents or medicines — (*see medicines*)	253
Curing hides and skins — (*see leather*)	243
Curing meat — (*see preserving food*)	337
Curing smoky chimneys — (*see flues*)	163
Currants,–washing and cleaning — (*see preserving food*)	337
Curtains — (*see upholstery*)	462
Cushions and pillows — (*see upholstery*)	462
Cushions for horse-shoes — (*see horse-shoes*)	227
Cut pile fabrics,–manufacture of — (*see weaving*)	490
Cutlery — (*see knives*)	236
Cutting, sawing, planing	104
Cutting and spreading grasses — (*see reaping*)	381
Cutting counter-sunk holes — (*see boring*)	39
Cutting files — (*see files and rasps*)	148
Cutting hair off horses — (*see shearing*)	389
Cutting rock for tunnelling — (*see excavating*)	137
Cuttings for canals — (*see docks*)	117
Cylinder printing machines — (*see printing*)	344
Cylinders, rollers, drums; covering rollers	109
Damage and explosions,–preventing — (*see accidents*)	1
Dampers for increasing draft — (*see air-supplying*)	11
Damping and watering — (*see watering*)	477
Damping stamps — (*see stamps*)	425

	Page
Dating or printing tickets — (*see printing*)	344
Davits for ships — (*see ships' boats*)	395
Decanting liquids — (*see bottles*)	42
Decanting or drawing off from casks — (*see casks*)	72
Decay of wood, stone, &c.,–preventing the — (*see preserving wood*)	336
Decoctions and infusions — (*see extracts*)	139
Decolourising — (*see bleaching*)	33
Decomposing metallic salts — (*see metals*)	256
Decorations and architectural mouldings — (*see mouldings*)	291
Decorticating cereals — (*see thrashing*)	456
Defensive armour for forts and batteries — (*see fortifications*)	165
Demagnetising — (*see electricity*)	131
Demonstrating the persistence of vision — (*see optical instruments*)	303
Denoting temperature — (*see thermometers*)	455
Dentistry ; artificial teeth, toothpicks	113
Deodorizing — (*see disinfecting*)	114
Depilation of hides and skins — (*see leather*)	243
Depositing metal by electricity — (*see electro-plating*)	134
Depositing metals on metals — (*see metals*)	271
Depositing seed — (*see sowing*)	412
Deposits or sediments,–prevention of — (*see oxidation*)	306
Depurating fluids in process of decantation — (*see bottles*)	42
Descending mine shafts — (*see mining*)	275
Desiccating or drying — (*see drying*)	123
Designs in intaglio,–producing — (*see engraving*)	135
Designs in relief,–producing — (*see embossing*)	134
Desks — (*see furniture*)	179
Despatch boxes — (*see boxes*)	45
Destroying fire damp — (*see fire-engines*)	159
Destroying insects and vermin — (*see insects*)	230
Detaching boats from their davits — (*see ships' boats*)	395
Detergent or washing processes—(*see washing*)	473
Determining electrical resistance — (*see electricity*)	131
Determining the resistance of fluids — (*see thermometers*)	455
Detonating signals — (*see signals*)	400
Developing electrical currents and discharges — (*see electricity*)	131
Developing the sound of musical instruments — (*see musical instruments*)	292
Deviation of magnetic needles — (*see compasses*)	97
Devices in intaglio,–producing — (*see engraving*)	135
Devices in relief,–producing — (*see embossing*)	134
Diaries, diary blotting pads — (*see books*)	35
Dibbling and dropping seed — (*see sowing*)	412
Differential pumps — (*see pumps*)	365
Differential wheel gearing — (*see propelling*)	355
Diffusing odours or perfumes — (*see disinfecting*)	114
Digging apparatus or spades — (*see hammers*)	210
Digging machines — (*see ploughing*)	334
Digitoriums — (*see musical instruments*)	292
Dining tables — (*see furniture*)	179
Dip pipes — (*see pipes*)	326
Dipping candles — (*see candles*)	63
Dipping frames used in making matches — (*see matches*)	249
Disaggregating fibres for spinning — (*see spinning*)	413
Discharge printing, printing by discharge — (*see printing*)	344
Discharging fire-arms — (*see fire-arms*)	153
Discharging fluids,–taps for — (*see valves*)	464
Discharging grain from granaries — (*see thrashing*)	456
Discharging ships' cargoes—(*see ship-building*)	390
Diseases of animals,–cure of — (*see medical treatment*)	253
Diseases of the human body,–cure of — (*see medicines*)	253
Diseases of the spine,–treating — (*see surgery*)	449
Dishes and plates, dish covers — (*see plates*)	333
Disinfecting, deodorizing, perfuming	114
Disintegrating wood — (*see wood*)	507
Dispensing medicines — (*see medicines*)	253
Distending cloth during weaving — (*see weaving*)	494
Distending woven fabrics — (*see finishing*)	150
Distilling and rectifying	115
Distilling water — (*see filtering*)	148
Distributing advertisements and cards — (*see advertising*)	7
Distributing gas — (*see gas-burners*)	186
Distributing manure over land — (*see sowing*)	412
Distributing type — (*see printing*)	344
Distributing water, irrigating — (*see watering*)	477
Ditches and drains — (*see drains*)	121
Divans — (*see furniture*)	179
Dividing fuel into blocks — (*see fuel*)	167
Diving and swimming — (*see buoys*)	60
Docks, harbours, breakwaters, piers, landing stages, canals, sea walls, submarine works, weirs	117
Doffing apparatus used in spinning — (*see spinning*)	416
Dog cramps — (*see vices*)	473
"Dollys" or washing machines — (*see washing*)	473
Doors and gates ; door furniture	119
Double action pumps — (*see pumps*)	365
Double and single box pickers for looms — (*see weaving*)	494
Double fabrics,–manufacture of—(*see weaving*)	485
Double faced toilet soaps — (*see soap*)	411
Doubling yarns — (*see spinning*)	417
Down draft in chimneys,–preventing — (*see air-supplying*)	11
Drains, sewers, gutters ; drain pipes and tiles ; draining ; stench traps, sinks	121
Dramatic and scenic effects, illusory exhibitions, stage scenery, float lights	122
Drawers and flannel shirts — (*see shirts*)	396
Drawers for furniture, drawer knobs — (*see furniture*)	179
Drawing, writing and copying — (*see copying*)	103
Drawing carriages — (*see propelling*)	353
Drawing frames used in spinning — (*see spinning*)	417

	Page
Drawing off fluids,–taps for — (*see valves*)	464
Drawing off liquids from bottles — (*see bottles*)	42
Drawing paper — (*see paper*)	311
Drawing samples of grain from granaries — (*see thrashing*)	456
Dredging and excavating — (*see excavating*)	137
Dredging boxes — (*see plates*)	333
Dress fastenings — (*see buttons*)	62
Dresses, dress making — (*see petticoats*)	319
Dressing and finishing woven fabrics — (*see finishing*)	150
Dressing bags — (*see bags*)	30
Dressing cases — (*see boxes*)	45
Dressing corn, seeds and rice — (*see thrashing*)	456
Dressing hair — (*see hair-dressing*)	209
Dressing hides, skins and leather—(*see leather*)	243
Dressing or rubbing printers' type — (*see printing*)	344
Dressing ropes and cordage — (*see ropes*)	384
Dressing stone and marble — (*see stone*)	443
Dressing thread — (*see threads*)	458
Dressing yarns for weaving — (*see weaving*)	484
Drilling land, forming drills — (*see ploughing*)	334
Drilling or perforating — (*see boring*)	39
Drills for sowing seed and distributing manure — (*see sowing*)	412
Drinks or beverages — (*see brewing*)	50
Driving bands and belts — (*see straps*)	445
Driving carriages — (*see propelling*)	353
Driving machinery, ploughs and pumps — (*see propelling*)	355
Driving piles — (*see pile driving*)	323
Driving revolving retorts — (*see retorts*)	382
Driving screw propellers — (*see propelling*)	350
Drop guns — (*see fire-arms*)	153
Dropping seed into land — (*see sowing*)	412
Drowning,–saving from — (*see buoys*)	60
Drums, rollers and cylinders — (*see cylinders*)	109
Dry closets and water-closets — (*see water-closets*)	476
Dry steam,–promoting generation of — (*see steam-boilers*)	427
Drying, expressing moisture	123
Dwelling house fire-places — (*see fire-places*)	160
Dwelling houses — (*see building*)	57
Dyeing textile fabrics, yarns and materials; fixing colours; mordants	126
Dyes and printing colours	128

	Page
Ear-rings — (*see jewellery*)	230
Earth closets — (*see water-closets*)	476
Earthenware and porcelain; pottery kilns; potters' glazes; ceramic wares; terra cotta	129
Earths and earthy salts — (*see alkalies*)	24
Easels used by painters — (*see painting*)	308
Easy chairs — (*see furniture*)	179
Economising fuel — (*see smoke*)	406
Edibles, — preserving and preparing — (*see preserving food*)	337
Effecting telegraphic communications — (*see telegraphs*)	451
Effects of explosions,–preventing the — (*see accidents*)	1
Egg boilers — (*see cooking*)	102
Egg hatchers or incubators — (*see hatching*)	212
Eggs,–preserving, and beating — (*see preserving food*)	337
Ejecting water from steam-boilers— (*see steam-boilers*)	434
Elastic fabrics — (*see fabrics*)	140
Elastic packings for steam-engines — (*see steam-engines*)	436
Elastic stockings, stays and corsets — (*see surgery*)	449
Elastic straps for garments — (*see buttons*)	62
Electric light — (*see lamps*)	237
Electric telegraphs — (*see telegraphs*)	451
Electricity, galvanism and magnetism, and their application	131
Electrometers — (*see thermometers*)	455
Electro motive-power — (*see motive-power*)	290
Electro-plating and galvanizing; depositing metal by electricity	134
Elliptic springs — (*see springs*)	423
Embalming — (*see coffins*)	96
Embankments — (*see excavating*)	137
Embossing, producing raised patterns	134
Embroidering — (*see sewing*)	386
Emery papers — (*see grinding, sharpening*)	201
Emptying and charging retorts— (*see retorts*)	382
Enabling persons to travel through the air — (*see aërial machines*)	8
Enamelling, enamels	135
Endless bands for driving machinery — (*see straps*)	445
Engines driven by water — (*see waterwheels*)	481
Engines worked by heated air — (*see air engines*)	9
Engines worked by steam—(*see steam-engines*)	436
Engraving and etching; producing sunk devices	135
Entrenching — (*see excavating*)	137
Entwining or spiral leggings — (*see boots*)	37
Envelopes	136
Epsom salts — (*see medicines*)	253
Equilibrium slide valves — (*see valves*)	464
Equipment of ships — (*see ship-building*)	390
Escape of gas,–preventing the — (*see gas-burners*)	186
Escape of superfluous carbon from casks,–allowing the — (*see brewing*)	50
Escape or relief valves — (*see valves*)	464
Escapements of watches — (*see clocks*)	88
Escapes or fire-escapes — (*see fire-engines*)	159
Espaliers for training plants — (*see horticulture*)	228
Esparto,–preparing and spinning — (*see spinning*)	416
Essence of hops,–manufacturing — (*see brewing*)	50
Essences and extracts — (*see extracts*)	139
Etching — (*see engraving*)	135
Evaporating, surfaces for evaporating — (*see heating*)	215
Excavating and dredging; tunnels and embankments	137
Excavating coal — (*see mining*)	275
Excentric wheels and pulleys — (*see wheels for machinery*)	498

	Page
Excluding air in manufacturing processes — (*see air-supplying*)	17
Exercises and games — (*see games*)	182
Exhausters for gas apparatus — (*see gas-burners*)	186
Exhausting air, producing vacuum — (*see air-supplying*)	17
Exhibiting advertisements — (*see advertising*)	7
Exhibiting goods for sale — (*see show-cases*)	398
Exhibiting pictures — (*see pictures*)	322
Exhibitions in theatres, music halls, &c. — (*see dramatic effects*)	122
Expanding pulleys — (*see wheels for machinery*)	498
Expanding tables — (*see furniture*)	179
Explosions,–preventing — (*see accidents*)	1
Explosive compounds — (*see gunpowder*)	203
Explosive point of inflammable oils,–ascertaining — (*see thermometers*)	455
Exposing substances to the action of air — (*see air-supplying*)	17
Expressing moisture — (*see drying*)	123
Expressing oils and fatty matters — (*see oils from seeds*)	299
Extinguishing fires — (*see fire-engines*)	159
Extracting oils from vegetable substances — (*see oils from seeds*)	299
Extracting sugar from beet root — (*see sugar*)	446
Extractors used with fire-arms — (*see fire-arms*)	153
Extracts and decoctions	139
Eye diseases,–treating — (*see surgery*)	449
Eye-glasses and frames — (*see optical instruments*)	303
Eyelets — (*see buttons*)	62
Eyes and tongues of shuttles — (*see weaving*)	493
Fabrics; elastic fabrics	140
Fabrics made by cementation — (*see cemented fabrics*)	80
Fabrics made by felting — (*see fulling*)	170
Fabrics made by weaving — (*see weaving*)	485
Facilitating boats ascending and descending rivers — (*see propelling*)	350
Facilitating communication between guards and passengers — (*see signals*)	400
Facilitating the paying out of telegraphic cables — (*see telegraphs*)	451
Facilitating the removal of snow from streets — (*see paving*)	316
Facilitating the starting of railway carriages — (*see propelling*)	353
Facing metallic surfaces with other substances — (*see coating*)	90
Facing non-metallic substances — (*see coating*)	92
Faggots or fire-lighters — (*see fuel*)	167
Falling of cages in mine shafts,–preventing the — (*see mining*)	275
Fan blowers and bellows — (*see air-supplying*)	17
Fancy or figure weaving — (*see weaving*)	485
Fans, ladies' fans — (*see petticoats*)	319
Fans and ventilators — (*see ventilation*)	470
Fast knotted fabrics,–manufacture of — (*see weaving*)	490
Fasteners for neck-ties — (*see shirts*)	396
Fastening and strengthening gates — (*see doors*)	119
Fastening boxes — (*see boxes*)	45
Fastening iron bands on packages — (*see presses*)	339
Fastenings for bags — (*see bags*)	30
Fastenings for belts — (*see belts*)	33
Fastenings for books — (*see books*)	35
Fastenings for boots and shoes — (*see boots*)	37
Fastenings for brooches — (*see jewellery*)	230
Fastenings for driving belts and bands — (*see straps*)	445
Fastenings for gloves — (*see gloves*)	193
Fastenings for purses — (*see purses*)	370
Fastenings for railway permanent ways — (*see railways*)	372
Fastenings for securing bayonets on fire-arms — (*see bayonets*)	32
Fastenings for wearing-apparel — (*see buttons*)	62
Fastenings for windows and shutters — (*see windows*)	503
Fats and oils, fatty and oily matters — (*see oils from seeds*)	299
Fatty acids — (*see acids*)	6
Faucets — (*see valves*)	464
Feather beds — (*see upholstery*)	462
Feathers; artificial feathers and flowers	142
Fecal matters or manure — (*see manure*)	247
Fecundating agents — (*see manure*)	247
Feed motions for machinery — (*see propelling*)	355
Feed or nose bags for horses — (*see harness*)	211
Feeding bottles for infants and invalids — (*see medicines*)	253
Feeding carding-engines — (*see spinning*)	416
Feeding domestic animals,–substances for — (*see food for cattle*)	164
Feeding furnaces with fuel — (*see furnaces*)	171
Feeding metal plates to rolls — (*see metals*)	265
Feeding or supplying water to steam-boilers — (*see steam-boilers*)	434
Feeding paints on grinding stones — (*see grinding minerals*)	199
Feeding paper to printing machines — (*see printing*)	344
Feeding pulp in paper machines — (*see paper*)	311
Felting and fulling, felted fabrics — (*see fulling*)	170
Fences and railings	143
Fenders and fire-irons — (*see fire-places*)	160
Fermented and brewing, fermented liquors — (*see brewing*)	50
Ferruginous salts — (*see metallic salts*)	255
Ferry boats — (*see ship-building*)	390
Ferrying — (*see propelling*)	350
Fertilizing compounds — (*see manure*)	247
"Fettling" used in reduction of metals — (*see metals*)	256
Fibres (obtaining from plants, recovering from manufactured goods, separating, cleansing, packing)	144
Figure weaving — (*see weaving*)	485

	Page
Filaceous substances,–preparing and spinning (*see spinning*)	416
Files and clips	148
Files and rasps	148
Filling casks with liquors — (*see casks*)	72
Filling flasks with gunpowder — (*see gunpowder*)	203
Filling sacks with flour — (*see grinding corn*)	198
Filling sacks with grain — (*see thrashing*)	456
Filling splints into dipping frames — (*see matches*)	249
Filling teeth, filling for teeth— (*see dentistry*)	113
Filtering, purifying and clarifying liquids; filters; distilling water, softening water	148
Filtering paper — (*see paper*)	311
Fingers for mowing machines — (*see reaping*)	381
Finings for clearing fermented liquors — (*see brewing*)	50
Finishing, dressing, singeing, shearing, folding and pressing woven fabrics, yarns, &c., cutting fustians	150
Finishing paper — (*see paper*)	311
Fire alarms — (*see signals*)	400
Fire-arms, guns, ordnance, gun carriages, targets, rifle practice	153
Fire bars for furnaces — (*see furnaces*)	171
Fire bricks or hollow fire lumps— (*see bricks*)	53
Fire-engines; fire-escapes; extinguishing fires	159
Fire lighters and artificial fuel — (*see fuel*)	167
Fireplaces, grates and stoves; fenders and fire-guards	160
Fireproof and waterproof fabrics and buildings — (*see waterproof*)	479
Fireproof safes — (*see locks*)	245
Fire-screens — (*see window-blinds*)	502
Fireworks	162
Firing ordnance and fire-arms — (*see fire-arms*)	153
Fish and meat,–preserving — (*see preserving food*)	337
Fish plates employed upon railways — (*see railways*)	372
Fishing; fishing nets, fish hooks, oyster rakes	162
Fitting service pipes to water mains — (*see watering*)	477
Fitting ships' rudders — (*see steering*)	442
Fitting shoes to horses' feet — (*see horse-shoes*)	227
Fitting tubes in boilers — (*see steam-boilers*)	427
Fitting tubes in flues — (*see flues*)	163
Fittings for gas — (*see gas-burners*)	186
Fittings for harness rooms — (*see harness*)	211
Fittings for lamps — (*see lamps*)	237
Fittings for ships, fitting ships' rudders— (*see ship-building*)	390
Fittings for stables and cow-houses — (*see stables*)	424
Fittings for water-closets— (*see water-closets*)	476
Fixing armour on ships — (*see coating*)	93
Fixing colours in dyeing — (*see dyeing*)	126
Fixing door handles — (*see doors*)	119
Fixing metals on fabrics — (*see cemented fabrics*)	80
Fixing rails to railway sleepers — (*see railways*)	372
Fixing shoes to horses' feet—(*see horse-shoes*)	227
Flannels — (*see fabrics*)	140
Flannels,–manufacture of — (*see weaving*)	485
Flasks for containing gunpowder — (*see gunpowder*)	203
Flat grinding or polishing — (*see grinding, sharpening*)	201
Flattening and straightening saws — (*see cutting*)	104
Flattening metals — (*see metals*)	265
Flax,–heckling and spinning — (*see spinning*)	413
Flexible galvanic batteries— (*see electricity*)	131
Flights of stairs — (*see building*)	57
Floating, swimming and diving — (*see buoys*)	60
Floating docks — (*see docks*)	117
Floating in the air — (*see aërial machines*)	8
Floating lights or beacons — (*see buoys*)	60
Floats or automatic gauges — (*see gauges*)	190
Flock, flocked fabrics — (*see fulling*)	170
Floor cloths — (*see oil-cloths*)	296
Flooring and roofing, floors of buildings — (*see building*)	57
Flour,–manufacture of — (*see grinding corn*)	198
Flow of fluids,–regulating the — (*see valves*)	464
Flowers and foliage,–artificial — (*see feathers*)	142
Flues and chimneys; chimney tops; curing smoky chimneys; chimney wind guards	163
Flumes and water pipes — (*see pipes*)	326
Flutes and flageolets — (*see musical instruments*)	292
Fluting and planing — (*see cutting*)	104
Fluxes for metallurgical purposes — (*see metals*)	256
Flyer frames — (*see spinning*)	416
Flyers and spindles — (*see spindles*)	412
Flying in the air, flying steam-engines — (*see aërial machines*)	8
Fog or detonating signals — (*see signals*)	400
Folding newspapers and periodicals — (*see books*)	35
Folding sheets of paper — (*see paper*)	314
Folding wire netting — (*see wire*)	505
Folding woven fabrics — (*see finishing*)	150
Foliage and flowers,–artificial —(*see feathers*)	142
Food for cattle; fodder cutting; chaff cutting; root pulping	164
Food for human consumption,–preserving and preparing — (*see preserving food*)	337
Foot paths — (*see paving*)	316
Foot rot in sheep,–cure of— (*see medical treatment*)	253
Footstep bearings — (*see axles*)	27
Force of the atmosphere,–indicating — (*see thermometers*)	455
Forcing and propelling air— (*see air-supplying*)	17
Forcing fluids, force pumps — (*see pumps*)	365
Fore and aft sails for ships — (*see ships' rigging*)	395
Forging metals, forge hammers — (*see metals*)	265
Forks and knives — (*see knives*)	236
Forks used in agriculture— (*see ploughing*)	334
Forks used in making hay — (*see reaping*)	381
Formation of smoke,–preventing the — (*see smoke*)	406
Formation of yarns — (*see spinning*)	417
"Formes" used in printing — (*see printing*)	344

	Page
Forming drills in land — (*see ploughing*)	334
Forming or generating steam — (*see steam-boilers*)	427
Fortifications, batteries, ships of war, gun boats, armour plated ships	165
Fouling and corrosion,–prevention of — (*see oxidation*)	306
Foundations or bodies for hats — (*see hats*)	212
Foundering of vessels,–preventing the — (*see ship-building*)	390
Founding and casting type — (*see casting metals*)	74
Fountain pens — (*see pens*)	318
Fountains and wells — (*see watering*)	477
Founts of type — (*see printing*)	344
Fractures of limbs,–setting and curing the — (*see surgery*)	449
Frames and panels for doors— (*see doors*)	119
Frames for beaming warps — (*see weaving*)	484
Frames for dipping matches— (*see matches*)	249
Frames for holding bottles — (*see bottles*)	42
Frames for holding pickles, cruet frames — (*see plates*)	333
Frames for knitting — (*see weaving*)	490
Frames for looking glasses or mirrors — (*see looking glasses*)	246
Frames for pictures — (*see pictures*)	322
Frames for rock and coal cutting machines — (*see mining*)	275
Frames for roving, slubbing and spinning — (*see spinning*)	417
Frames for saws, sawing frames—(*see cutting*)	104
Frames for spectacles and eye glasses — (*see optical instruments*)	303
Frames for umbrellas — (*see umbrellas*)	461
Frames for winding yarns and thread — (*see winding*)	500
Frames for windows — (*see windows*)	503
Framing for lamps and lighthouse lanterns — (*see lamps*)	237
Freezing; producing ice — (*see condensing*)	98
"French twist" — (*see threads*)	458
Fresh-water fish,–capturing — (*see fishing*)	162
Fret sawing-machines — (*see cutting*)	104
Friction breaks for stationary machines — (*see governors*)	194
Friction matches — (*see matches*)	249
Fringes,–manufacture of— (*see weaving*)	492
Fronts for shirts — (*see shirts*)	396
Fronts for shops — (*see show-cases*)	398
Fruit and vegetables,–preserving — (*see preserving food*)	337
Fuel; treating coal; preparing fire-wood; fire-lighters	167
Fuel economisers — (*see smoke*)	406
Fuel feeding apparatus for furnaces — (*see furnaces*)	171
Fulling and felting; felted fabrics; flock, wadding	170
Fulminating powders — (*see gunpowder*)	203
Fumes or smoke,–prevention of — (*see smoke*)	406
Funnels used in sugar making— (*see sugar*)	446
Furling and reefing sails — (*see ships' rigging*)	395
Furnaces and fire-boxes; supplying furnaces with fuel	171
Furniture; bedsteads, tables, chairs, cradles and nursing apparatus; castors, bedstead bottoms, desks	179
Furniture covers — (*see oil-cloths*)	296
Furniture for doors — (*see doors*)	119
Furniture for lamps — (*see lamps*)	237
Furniture for umbrellas — (*see umbrellas*)	461
Furze or gorse, preparing for cattle food — (*see food for cattle*)	164
Fustian cutting — (*see finishing*)	150
Galleries and tunnels — (*see excavating*)	137
Gallic acid— (*see acids*)	6
Galvanising — (*see electro-plating*)	134
Galvanism, galvanic batteries — (*see electricity*)	131
Game and poultry,–preserving — (*see preserving food*)	337
Games and exercises; billiards and bagatelle	182
Garments for ladies' wear — (*see petticoats*)	319
Garments worn by men — (*see wearing-apparel*)	483
Gas, gasometers, holders and retorts; oxygen	183
Gas and air engines — (*see air engines*)	9
Gas and atmospheric air,–carburetting — (*see aërating*)	7
Gas and other burners and regulators; gas fittings; lighting gas; preventing escape of gas	186
Gas meters — (*see meters*)	273
Gaseliers — (*see lamps*)	237
Gasket or circular webbing,–manufacture of — (*see weaving*)	492
Gates and doors — (*see doors*)	119
Gathering oysters,–submarine tongs for — (*see fishing*)	162
Gauges, safety plugs, water level indicators	190
Gauges or guides for machinery — (*see propelling*)	355
Gauging size and capacity, machine gauges — (*see measuring length*)	250
Gauze blinds or screens — (*see window-blinds*)	502
Gear for valves, valve gear — (*see valves*)	464
Gearing for transmitting motion — (*see propelling*)	355
Generating electricity — (*see electricity*)	131
Generating heat — (*see heating*)	215
Generating steam — (*see steam-boilers*)	427
Getting coals — (*see mining*)	275
Gibs applicable to cross heads of steam-engines — (*see steam-engines*)	436
"Giffard's injector" — (*see steam-boilers*)	434
Gimlets — (*see boring*)	39
Ginning cotton, cotton gins — (*see fibres*)	144
Girders for bridges — (*see bridges*)	54
Girders used in building houses — (*see building*)	57
Giving a face to woven fabrics — (*see finishing*)	150
Giving alarm — (*see signals*)	400
Giving answers to selected questions — (*see calculating*)	62
Giving motion to fluids — (*see propelling*)	350
Giving motion to machinery — (*see propelling*)	355
Glass; applications of glass	191

	Page
Glass and emery papers— (*see grinding, sharpening*)	201
Glasses for the eye — (*see optical instruments*)	303
Glazed paper — (*see paper*)	311
Glazes and lacquer — (*see painting*)	308
Glazing woven fabrics — (*see finishing*)	150
Globes and glasses for lamps — (*see glass*)	191
Gloves	193
Glue — (*see starch*)	427
Go carts — (*see carriages*)	64
Goffering — (*see mangling*)	246
Gorse,–preparing for cattle food — (*see food for cattle*)	164
Governing railway signals — (*see signals*)	400
Governing the action of railway points — (*see railways*)	374
Governors and indicators of speed and power for stationary engines and machinery; starting, stopping and reversing apparatus; machinery-breaks	194
Governors of gas pressure— (*see gas-burners*)	186
Grain and seeds,–grinding and crushing — (*see grinding corn*)	198
Grains used in brewing — (*see brewing*)	50
Granaries, repositories for grain — (*see thrashing*)	456
Granite,–artificial— (*see stone*)	443
Grape vines,–apparatus for training — (*see horticulture*)	228
Graphite — (*see metallic salts*)	255
Grass cutters— (*see reaping*)	381
Grates and stoves — (*see fire-places*)	160
Grease for lubricating — (*see oiling*)	297
Green colouring matters — (*see dyes*)	128
Greenhouses — (*see horticulture*)	228
Grinding and crushing corn, grain, seeds, &c.; dressing flour; millstones; decorticating grain; grinding dried meat	198
Grinding and crushing minerals, clay, fibrous plants, &c.; breaking stone	199
Grinding and sharpening; flat grinding and polishing; grinding-surfaces; emery, sand and glass papers and cloths	201
Grinding or tearing up rags — (*see rags*)	370
Grindstones and millstones — (*see stone*)	443
Gripping or holding reins and whips — (*see harness*)	211
Grooming horses — (*see harness*)	211
Grooving, cutting grooves — (*see cutting*)	104
Growing hops — (*see horticulture*)	228
Grubbing up uncultivated land — (*see ploughing*)	334
Guaging or measuring size and quantity — (*see measuring length*)	250
Guards for fire-places, fire guards — (*see fire-places*)	160
Guards for the hat — (*see hats*)	212
Guards for wheels of reaping machines —(*see reaping*)	381
Guards or cowls for chimney shafts — (*see flues*)	163
Gudgeons and pins for rudders— (*see steering*)	442
Guides and adjustments for machinery — (*see propelling*)	355
Guiding or steering ships, carriages, ploughs, &c. — (*see steering*)	442
Gum and glue — (*see starch*)	427
Gun-cotton — (*see gunpowder*)	203
Gunpowder and explosive compounds; powder flasks; xyloidine	203
Guns and cannons — (*see fire-arms*)	153
Gut skins — (*see leather*)	243
Gutta-percha and india-rubber — (*preparing, treating, vulcanizing*)	204
Gutta-percha and india-rubber as applied in various manufactures	204
Gutters and drains — (*see drains*)	121
Hair-dressing and perfumery	209
Hammering metals — (*see metals*)	265
Hammers, axes, picks, spades, trowels	210
Hand composing machines — (*see printing*)	344
Hand garden engines — (*see watering*)	477
Hand screw propellers — (*see propelling*)	350
Handles and backs for brushes — (*see brushes*)	56
Handles and knobs for doors — (*see doors*)	119
Handles for files — (*see files and rasps*)	148
Handles for knives and forks — (*see knives*)	236
Handles for pails and buckets — (*see cisterns*)	86
Handles for saucepans — (*see cooking*)	102
Handles for spades and shovels — (*see hammers*)	210
Hanging windows and shutters — (*see windows*)	503
Hangings or paper hangings — (*see paper*)	316
Harbours and docks — (*see docks*)	117
Hardening metals — (*see metals*)	256
Hardening wood, leather, &c. — (*see preserving wood*)	336
Harmoniums — (*see musical instruments*)	292
Harness, saddles, curbs, whips; releasing from harness; shearing and grooming horses; nose bags	211
Harness for looms — (*see weaving*)	494
Harnessing animals to carriages — (*see harness*)	211
Harrowing land, harrows — (*see ploughing*)	334
Harvesting machines — (*see reaping*)	381
Hatching eggs	212
Hats, caps, bonnets, ladies' caps, cap-fronts; coverings for the head; head dresses, head ornaments	212
Hauling heavy bodies — (*see hoists*)	223
Hauling or drawing carriages — (*see propelling*)	353
Hay and chaff cutting — (*see food for cattle*)	164
Hay-making machines — (*see reaping*)	381
Head dresses and ornaments — (*see hats*)	212
Heading nails — (*see nails*)	293
Headings for casks — (*see casks*)	72
Heads of pistons — (*see pistons*)	331
Healds or harness for looms — (*see weaving*)	494
Heated air engines — (*see air engines*)	9
Heating and evaporating; regulating heat	215
Heckling fibrous materials — (*see spinning*)	416
Heddles or harness for looms — (*see weaving*)	494
Heels for boots and shoes, heel tips and toe tips — (*see boots*)	37

	Page
Helmets — (*see hats*)	212
Hem folders and tuckers for sewing-machines — (*see sewing*)	386
Hemp,–heckling and spinning — (*see spinning*)	416
Hernia trusses — (*see surgery*)	449
Hexagon nuts — (*see nails*)	293
Hides and skins — (*see leather*)	243
High temperatures,–producing — (*see heating*)	215
Highways, roads and streets,–making and repairing — (*see paving*)	316
Hobby horses and automaton toys —(*see toys*)	460
Hoeing land, horse hoes — (*see ploughing*)	334
Hoists, cranes, capstans, windlasses; raising, lowering and moving heavy bodies; raising from mines; raising sunken ships	223
Holders for brooms — (*see brushes*)	56
Holders for candles — (*see lamps*)	237
Holders for cigars — (*see tobacco*)	459
Holders for drills or boring tools—(*see boring*)	39
Holders for gas, gasometers — (*see gas*)	183
Holders for maps — (*see maps*)	249
Holders for pens — (*see pens*)	318
Holders for shot — (*see shot*)	397
Holders for tooth picks — (*see dentistry*)	113
Holders or boxes for twine or cord — (*see ropes*)	384
Holders or racks for whips — (*see harness*)	211
Holders or stands for books — (*see books*)	35
Holding and igniting matches— (*see matches*)	249
Holding and lifting plates and dishes — (*see plates*)	333
Holding and presenting advertising cards — (*see advertising*)	7
Holding music-books — (*see musical instruments*)	292
Holeing and cutting coals — (*see mining*)	275
Hollow bricks or blocks — (*see bricks*)	53
Hoods for carriages — (*see carriages*)	64
Hoofs and horns — (*see bones*)	35
Hooks, tackle hooks — (*see chains*)	81
Hooks for fishing — (*see fishing*)	162
Hoop iron fastenings for bales — (*see presses*)	339
Hoops and rings — (*see chains*)	81
Hops,–training — (*see horticulture*)	228
Hops,–treating — (*see brewing*)	50
Horizontal lines,–indicating — (*see compasses*)	97
Horn and ivory,–substitutes for — (*see bones*)	35
Horse collars — (*see harness*)	211
Horse hoes — (*see ploughing*)	334
Horse rakes used in cultivating land — (*see ploughing*)	334
Horse rakes used in making hay — (*see reaping*)	381
Horse shoes, shoeing horses	227
Horticulture, conservatories, lawn mowing, training plants	228
Hose for conveying water — (*see pipes*)	326
Hose or stockings — (*see shirts*)	396
Hosiery machines, stocking frames — (*see weaving*)	490
Hothouses and conservatories — (*see horticulture*)	228
Houses or buildings — (*see building*)	57
Hubs for carriage wheels — (*see wheels for carriages*)	496
Hulling grain and rice — (*see thrashing*)	456
Hulls of navigable vessels—(*see ship-building*)	390
Hurdles and fences — (*see fences*)	143
Husking barley — (*see thrashing*)	456
Hydrate of soda — (*see alkalies*)	24
Hydraulic lifts — (*see hoists*)	223
Hydraulic mastics — (*see cement*)	79
Hydraulic motive-power — (*see waterwheels*)	481
Hydraulic presses — (*see presses*)	339
Hydro-carbon oils used as fuel — (*see fuel*)	167
Hydro-carbons — (*see oils of tar*)	301
Hydro-extractors — (*see drying*)	123
Hydro-pneumatic pumps — (*see pumps*)	365
Hydrogen — (*see gas*)	183
Hydropults — (*see watering*)	477
Hydrostatic engines — (*see waterwheels*)	481
Hygiene, hygienic lotions and appliances — (*see medicines*)	253
Ice, ice-safes and refrigerators — (*see condensing*)	98
Iced beverages — (*see aërating*)	7
Igniting fuel and lighting fires — (*see fuel*)	167
Igniting matches — (*see matches*)	249
Igniting point of inflammable oils,–ascertaining — (*see thermometers*)	455
Illuminating and producing light—(*see lamps*)	237
Illuminating gas — (*see gas*)	183
Illuminating roof and roof pavement — (*see building*)	57
Illusory exhibitions — (*see dramatic effects*)	122
Imitation of stained glass — (*see glass*)	191
Imitation silvering on looking glasses — (*see looking glasses*)	246
Imitation skins of animals — (*see leather*)	243
Imparting buoyancy — (*see buoys*)	60
Imparting motion to machinery — (*see propelling*)	355
Impervious to water and air,–rendering fabrics — (*see waterproof*)	479
Implements of cutlery — (*see knives*)	236
Inclined lines,–indicating — (*see compasses*)	97
Increasing draft in furnaces, stoves, &c. — (*see air-supplying*)	11
Increasing light — (*see lamps*)	237
Increasing the tones of musical instruments — (*see musical instruments*)	292
Incrustation and sediment,–removing — (*see oxidation*)	306
Incubators or egg hatchers — (*see hatching*)	212
Indenting railway tickets — (*see stamps*)	425
Indexes or tell-tales for machines — (*see measuring length*)	250
Indexes to meters — (*see meters*)	273
India-rubber,–preparing and vulcanising — (*see gutta-percha,–treating*)	204
India-rubber as applied in various manufactures — (*see gutta-percha as applied*)	204
Indicating atmospheric changes— (*see thermometers*)	455
Indicating numbers and names on doors—(*see show-cases*)	398
Indicating or signalling apparatus — (*see signals*)	400
Indicating quantity of gas and fluids supplied — (*see meters*)	273

	Page
Indicating time — (*see clocks*)	88
Indicating weight — (*see weighing*)	496
Indicators and turnstiles for carriages — (*see measuring progress*)	252
Indicators of speed and power in stationary engines — (*see governors*)	194
Indigo — (*see dyes*)	128
Induction machines for working telegraphs — (*see telegraphs*)	451
Induction of steam into steam-engines — (*see steam-engines*)	436
Indurating or hardening wood, stone and plaster — (*see preserving wood*)	336
Infants' feeding bottles — (*see bottles*)	42
Inflammable gases — (*see gas*)	183
Infusions and extracts — (*see extracts*)	139
Infusions of coffee — (*see coffee*)	96
Ingots for nail making — (*see nails*)	293
Inhalation for the cure of disease — (*see medicines*)	253
Injecting air or gas in manufacturing processes — (*see air supplying*)	17
Injecting or supplying water — (*see watering*)	477
Injectors for steam-boilers—(*see steam-boilers*)	434
Injury by damp,–preventing — (*see waterproof*)	479
Inks and inkstands	229
Insects and vermin (destroying)	230
Inserting cardboards between the folds of fabrics — (*see finishing*)	150
Inserting tufts in fabrics — (*see cemented fabrics*)	80
Instructing soldiers to fire with precision — (*see fire-arms*)	153
Instruments for indicating temperature — (*see thermometers*)	455
Instruments used in surgery — (*see surgery*)	449
Insulators of electric telegraphs — (*see telegraphs*)	451
Intaglios, surfaces in intaglio — (*see engraving*)	135
Intermittent motions for machinery — (*see propelling*)	354
Introducing air for manufacturing purposes— (*see air-supplying*)	17
Introducing fluids to surface condensers of steam-engines — (*see steam-engines*)	436
Invalid furniture — (*see surgery*)	449
Invulnerable cloth armour — (*see wearing-apparel*)	483
Iron and steel — (*see metals*)	256
Iron forks used in agriculture — (*see ploughing*)	334
Iron pavements — (*see paving*)	316
Ironing, smoothing irons — (*see mangling*)	246
Irons for planes —(*see cutting*)	104
Irrigation or distribution of water — (*see watering*)	477
Isochronous movements for watches — (*see clocks*)	88
Issuing tickets progressively numbered — (*see stamps*)	425
Ivory, horn and bone,–substitutes for — (*see bones*)	35
Jackets, coats and waistcoats — (*see wearing-apparel*)	483
Jackets for steam-engines — (*see steam-engines*)	436
Jacquard engines — (*see weaving*)	485
Jars and bottles — (*see bottles*)	42
Jerks and strains,–preventing—(*see accidents*)	1
Jetties and piers — (*see docks*)	117
Jewellery, lockets, brooches, bracelets, watch chains, swivels and keys	230
Joining, jointing, coupling, pipe joints, railway joints, furniture joints and hinges; packing for joints	231
Journals and bearings — (*see axles*)	27
Jugs and bowls — (*see earthenware*)	129
Juice of the sugar-cane — (*see sugar*)	446
Jumping or skipping hoops — (*see games*)	182
"Jupons" — (*see petticoats*)	319
Jute,–preparing and spinning — (*see spinning*)	416
Kaleidoscopes — (*see optical instruments*)	303
Kettles and pans used in cooking — (*see cooking*)	102
Key boards and pedal actions — (*see musical instruments*)	292
Keys and lock fastenings — (*see locks*)	245
Keys for watches and clocks — (*see jewellery*)	230
Killing whales — (*see fishing*)	162
Kilns — (*see ovens*)	304
Kitchen ranges — (*see fire-places*)	160
Knapsacks — (*see wearing-apparel*)	483
Kneading paste for making bread — (*see bread*)	47
Knitting, frames for knitting, knitted fabrics — (*see weaving*)	490
Knitting healds — (*see weaving*)	494
Knives, forks, spoons, scissors, shears; cleaning knives, forks and spoons	236
Knobs and handles for doors — (*see doors*)	119
Knobs for locks and latches — (*see locks*)	245
Label bands — (*see files and clips*)	148
Labels and tickets — (*see stamps*)	425
Laboratory for photographic purposes — (*see photography*)	321
Lace making — (*see weaving*)	490
Ladders — (*see building*)	57
Ladders for fire-escapes — (*see fire-engines*)	159
Ladies' belts — (*see belts*)	33
Ladies' dresses — (*see petticoats*)	319
Ladles and spoons — (*see knives*)	236
"Lady's companion" or workbox — (*see boxes*)	45
Lamp posts — (*see pillars*)	324
Lamp reflectors — (*see reflectors*)	382
Lamp wicks — (*see candles*)	63
Lamps, lanterns, chandeliers, candlesticks; lamp furniture, glasses and shades; lighting, producing light	237
Land boilers — (*see steam-boilers*)	427
Land irrigation — (*see watering*)	477
Land rollers and cultivators — (*see ploughing*)	334
Landaus and barouches — (*see carriages*)	64

	Page
Landing, transhipping and discharging cargoes from ships — (*see ship-building*)	390
Landing stages — (*see docks*)	117
Landings on staircases — (*see building*)	57
Lanterns — (*see lamps*)	237
Lappers and scutchers for cotton spinning — (*see spinning*)	413
Lastings,–looms for weaving — (*see weaving*)	485
Lasts for boots and shoes — (*see boots*)	37
Latches and locks — (*see locks*)	245
Latches for windows — (*see windows*)	503
Lathes for turning — (*see turning*)	461
Lathes used in weaving-looms — (*see weaving*)	485
Launching ships and boats — (*see ship-building*)	390
Lawn mowing machines — (*see reaping*)	381
Laying cordage and twine — (*see ropes*)	384
Laying telegraphic cables — (*see telegraphs*)	451
Lead — (*see metals*)	256
Learning to play on musical instruments — (*see musical instruments*)	292
Leather, skins and hides; artificial leather and parchment; currying, tanning, cutting and ornamenting leather	243
Leather straps and driving bands — (*see straps*)	445
Leeds alpaca cloth — (*see fabrics*)	140
Lees from soap-making,–recovering — (*see soap*)	411
Leggings — (*see boots*)	37
Legs,–artificial — (*see surgery*)	449
Length,–measuring — (*see measuring length*)	250
Lenses — (*see optical instruments*)	303
Letter balances — (*see weighing*)	496
Letter boxes — (*see boxes*)	45
Letter pillars — (*see pillars*)	324
Letterpress printing — (*see printing*)	344
Letter stamps, stamping letters — (*see stamps*)	425
Letters or type for printing — (*see printing*)	344
Letting down and weighing anchors — (*see anchors*)	26
Letting-off motion in looms — (*see weaving*)	495
Level of water,–indicating the — (*see gauges*)	190
Levelling and surveying — (*see compasses*)	97
Lever watch movements — (*see clocks*)	88
Levers for working railway points — (*see railways*)	374
Life boats — (*see ship-building*)	390
Life buoys — (*see buoys*)	60
Lifters and holders for shot — (*see shot*)	397
Lifting and holding plates and dishes — (*see plates*)	333
Lifting or driving water — (*see pumps*)	365
Lifting or raising heavy bodies, lifting-jacks — (*see hoists*)	223
Lifts or cages used in mining operations — (*see mining*)	275
Light reflectors — (*see reflectors*)	382
Lighters and rafts — (*see ship-building*)	390
Lighthouses — (*see buoys*)	60
Lighting candles — (*see candles*)	63
Lighting cigars, cigar and pipe lighters — (*see tobacco*)	459
Lighting fires, fire-lighters — (*see fuel*)	167
Lighting gas jets — (*see gas-burners*)	186
Lighting or illuminating — (*see lamps*)	237
Lightning conductors — (*see electricity*)	131
Limbs for the human body,–artificial — (*see surgery*)	449
Lime and its compounds — (*see alkalies*)	24
Line, cordage and ropes — (*see ropes*)	384
"Lingoes" used in looms for weaving — (*see weaving*)	485
Lining metallic surfaces with other substances — (*see coating*)	90
Lining non-metallic substances — (*see coating*)	92
Linings for carpets — (*see upholstery*)	462
Linings for hats — (*see hats*)	212
Linings for trunks and boxes — (*see boxes*)	45
Linings for wearing-apparel — (*see wearing-apparel*)	483
Links or bridge links — (*see bridges*)	54
Liquid meters — (*see meters*)	273
Liquid-proof fabrics and paper — (*see waterproof*)	479
Liquor frames for holding bottles — (*see bottles*)	42
Litharge — (*see painting*)	308
Lithographic printing — (*see printing*)	344
Loading carts — (*see carriages*)	64
Loading cranes — (*see hoists*)	223
Loading heavy ordnance and fire-arms — (*see fire-arms*)	153
Loading ships, shipping cargoes — (*see ship-building*)	390
Lockets — (*see jewellery*)	230
Locking and unlocking railway points — (*see railways*)	374
Locking gates — (*see doors*)	119
Locking packing-cases — (*see boxes*)	45
Locking screw nuts — (*see nails*)	293
Locking the levers for working signals — (*see signals*)	400
"Locking up" type in chases — (*see printing*)	344
Locks, latches, bolts, lock furniture; keys, safes, strong boxes	245
Locks for chains and chain cables — (*see chains*)	81
Locks for fire-arms — (*see fire-arms*)	153
Locks on canals — (*see docks*)	117
Locomotion on land — (*see propelling*)	353
Locomotion on water — (*see propelling*)	350
Locomotive figures or toys — (*see toys*)	460
Locomotive steam-engines — (*see steam-engines*)	436
Logs and sounders — (*see measuring progress*)	252
"Long ells" — (*see fabrics*)	140
Looking-glasses and frames	246
Loom harness — (*see weaving*)	494
Loom indexes — (*see measuring length*)	250
Looms for weaving — (*see weaving*)	485
Looped fabrics,–manufacture of — (*see weaving*)	490
Lotions for diseases of the eyes — (*see medicines*)	253
Lowering, detaching and picking up ships' boats — (*see ships' boats*)	395
Lowering heavy bodies — (*see hoists*)	223
Lubricating or oiling — (*see oiling*)	297
Lucifer matches — (*see matches*)	249

	Page
Machine belting — (*see straps*)	445
Machine registers — (*see measuring length*)	250
Machine tools — (*see hammers*)	210
Machinery breaks — (*see governors*)	194
Machinery wheels — (*see wheels for machinery*)	498
Madder — (*see dyes*)	128
Magazines for containing explosive compounds — (*see gunpowder*)	203
Magic lanterns — (*see optical instruments*)	303
Magnesia and salts of magnesia — (*see alkalies*)	24
Magnetism, magnets, magneto-electricity — (*see electricity*)	131
Mains for supplying water — (*see watering*)	477
Making hay — (*see reaping*)	381
Making up and finishing woven fabrics — (*see finishing*)	150
Making up cartridges — (*see cartridges*)	69
Making up needles for sale — (*see pins*)	325
Making up or papering goods for sale — (*see presses*)	339
Mallets for croquet — (*see games*)	182
Malt liquors, treating malt and hops — (*see brewing*)	50
Mangel wurzel,–preparing for cattle food — (*see food for cattle*)	164
Mangling, ironing, goffering, rouching	246
Manœuvring or working ships — (*see ship-building*)	390
Mantel-pieces	247
Mantles and shawls — (*see petticoats*)	319
Manufacture of fabrics by cementation — (*see cemented fabrics*)	80
Manufacture of fabrics by felting—(*see fulling*)	170
Manufacture of metals — (*see metals*)	256
Manufacture or finishing of textile fabrics — (*see finishing*)	150
Manufacture or weaving of textile fabrics — (*see weaving*)	485
Manumotive carriages — (*see carriages*)	64
Manure; treating sewage	247
Manure and seed drills — (*see sowing*)	412
Maps and charts	249
Marble and stone — (*see stone*)	443
Marine baths — (*see baths*)	31
Marine boilers — (*see steam-boilers*)	427
Marine lights — (*see buoys*)	60
Marine propulsion — (*see propelling*)	350
Marine steam-engines — (*see steam-engines*)	436
Marine works or foundations — (*see docks*)	117
Mariners' compasses — (*see compasses*)	97
Marquees or tents — (*see building*)	57
Mashing and mixing — (*see mixing*)	279
Mashing malt, mash tuns — (*see brewing*)	50
Massa and meerschaum pipes —(*see tobacco*)	459
Masts and yards for ships — (*see ship-building*)	390
Matches, fuses, pipe and cigar lights	249
Mathematical instruments— (*see compasses*)	97
Mats and rugs — (*see upholstery*)	462
Mattresses, beds and couches — (*see upholstery*)	462
Measure taps — (*see valves*)	464
Measures of capacity — (*see measuring length*)	250
Measuring and gauging length, size and quantity; loom and other machine registers; appointment and date indicators; vote registers	250
Measuring and registering progress of locomotives, carriages and ships; carriage turnstiles, registers and counting-apparatus; logs and sounders; measuring and indicating flow of streams	252
Measuring angles — (*see compasses*)	97
Measuring temperature, force and strength of fluids — (*see thermometers*)	455
Measuring the flow and quantity of liquids and gas supplied — (*see meters*)	273
Meat, poultry and game,–preserving — (*see preserving food*)	337
Mechanical motive-power — (*see motive-power*)	290
Mechanical toys — (*see toys*)	460
Medalling and coining — (*see coins*)	97
Medical treatment of animals, washing, dipping and smearing	253
Medicines and curative apparatus; medical baths; inhaling and respiratory apparatus	253
Meerschaum and massa pipes — (*see tobacco*)	459
Melting and smelting metals — (*see metals*)	256
Merchant ships — (*see ship-building*)	390
Metal sheathing for ships and fortifications — (*see coating*)	93
Metal ties or bands for bales— (*see presses*)	339
Metallic alloys, alloying metals — (*see metals*)	256
Metallic capsules for bottles — (*see bottles*)	42
Metallic cases or boxes — (*see boxes*)	45
Metallic castings — (*see casting metals*)	74
Metallic compounds —(*see metals*)	256
Metallic eye for laces — (*see buttons*)	62
Metallic healds — (*see weaving*)	494
Metallic plate — (*see metals*)	271
Metallic salts and oxides	255
"Metallic zinc paint" — (*see painting*)	308
Metallurgical operations — (*see metals*)	256
Metals	256
Meteorological instruments — (*see thermometers*)	455
	455
Meters for gas and fluids	273
Meters or measures for corn — (*see measuring length*)	250
Mica valves — (*see valves*)	464
Microscopes — (*see optical instruments*)	303
Military outfits — (*see wearing-apparel*)	483
Milk,–preserving — (*see preserving food*)	337
Milk cans — (*see churns*)	85
Millboard — (*see paper*)	311
Milling cloths, machines for milling — (*see fulling*)	170
Milling tools — (*see cutting*)	104
Mills or machines for rolling metals — (*see metals*)	265
Millstones and grindstones — (*see stone*)	443
Mincing food for animals — (*see food for cattle*)	164
Mincing meat — (*see preserving food*)	337
Mineral oils — (*see oils of tar*)	301
Mineral waters —(*see aërating*)	7
Minerals,–grinding and crushing — (*see grinding minerals*)	199
Minerals or metals — (*see metals*)	256
Miniature dispensary and instrument case — (*see medicines*)	253
Miniatures and portraits — (*see pictures*)	322

	Page
Mining; boring and blasting rock; raising from mines, getting coals; draining, lighting and ventilating mines; sinking wells	275
Mirrors — (*see looking-glasses*)	246
Mixing, mashing, stirring, agitating	279
Mixtures or compositions for bleaching — (*see bleaching*)	33
Mixtures used as fuel — (*see fuel*)	167
Model or toy ships or boats — (*see toys*)	460
Moderator lamps — (*see lamps*)	237
Mohair fabrics,–weaving — (*see weaving*)	485
Momentum of heavy bodies,–rendering innocuous the — (*see accidents*)	1
Momentum of heavy bodies,–storing and accumulating — (*see motive-power*)	290
Money boxes — (*see boxes*)	45
Monograms and seals — (*see stamps*)	425
Mordants used in dyeing — (*see dyeing*)	126
Mosaic veneers — (*see wood*)	507
Motive-power machines; obtaining motive-power	280
Mould boards for ploughs — (*see ploughing*)	334
Moulding metals, moulder's blackening — (*see casting metals*)	74
Moulding plastic articles, moulding fuel — (*see casting plastic*)	77
Mouldings and architectural ornaments	291
Moulds used in making candles—(*see candles*)	63
Mounting and working ordnance — (*see fire-arms*)	153
Mounting bells — (*see bells*)	32
Mounting valves — (*see valves*)	464
Mounting wheels on axles — (*see wheels for carriages*)	496
Mounts for maps — (*see maps*)	249
Mounts for pictures — (*see pictures*)	322
Mourning lockets — (*see jewellery*)	230
Movements for watches — (*see clocks*)	88
Moving and raising heavy bodies — (*see hoists*)	223
Moving carriages, velocipedes, &c. — (*see propelling*)	353
Moving fire bars in furnaces — (*see furnaces*)	171
Moving grain — (*see thrashing*)	456
Moving or driving machinery — (*see propelling*)	355
Mowing and reaping — (*see reaping*)	381
Muffs — (*see petticoats*)	319
Mulberry bark — (*see plants*)	332
Mules for spinning — (*see spinning*)	417
Multiplying power for driving machinery — (*see propelling*)	355
Multitubular boilers — (*see steam-boilers*)	427
Muriate of ammonia — (*see alkalies*)	24
Musical instruments and notation; turning over leaves of music, music stools, digitoriums	292
Mustard,–appliances for serving — (*see plates*)	333
Muzzle of fire-arms, muzzle-loading fire-arms — (*see fire-arms*)	153

Nails, spikes, bolts, rivets, screws, nuts, washers and dies; angle iron, T iron, brackets	293
Name plates — (*see show-cases*)	398
Naphtha — (*see oils of tar*)	301
Narrow weaving, smallwares — (*see weaving*)	492
"Nature printing" from plants, &c. — (*see printing*)	344
Nautical compasses and instruments — (*see compasses*)	97
Naval architecture — (*see ship-building*)	390
Navigable vessels — (*see ship-building*)	390
Navigating the air — (*see aërial machines*)	8
Necklaces — (*see jewellery*)	230
Neckties — (*see shirts*)	396
Needle guns, needle-exploding fire-arms — (*see fire-arms*)	153
Needle work — (*see sewing*)	386
Needles, needle cases — (*see pins*)	325
Net covers — (*see oil-cloths*)	296
Nets and netting,–manufacture of — (*see weaving*)	490
Nets for fishing, trawl nets — (*see fishing*)	162
New Zealand flax,–heckling and spinning — (*see spinning*)	416
Newspapers and periodicals,–folding — (*see books*)	35
Nickel—(*see metals*)	256
Night and fog signals — (*see signals*)	400
Night commodes — (*see water-closets*)	476
Nippers — (*see vices*)	473
Nitro-glycerine — (*see gunpowder*)	203
Non-inflammable,–rendering fabrics — (*see waterproof*)	479
Nose bags for horses — (*see harness*)	211
Noxious fumes or smoke,–prevention of — (*see smoke*)	406
Number plates — (*see show-cases*)	398
Nut and seed oil — (*see oils from seeds*)	299
Nutmegs, nutmeg graters — (*see preserving food*)	337
Nuts and washers — (*see nails*)	293

Oakum — (*see ropes*)	384
Oars and propellers — (*see propelling*)	350
Oats and other grain,–crushing — (*see grinding corn*)	198
Obliterating postage and other stamps — (*see stamps*)	425
Oboes and bassoons—(*see musical instruments*)	292
Obtaining motive-power — (*see motive-power*)	280
Obtaining publicity — (*see advertising*)	7
Odours or perfumes,–diffusing — (*see disinfecting*)	114
Office or appointment indicators — (*see measuring length*)	250
Oil cake for cattle feeding — (*see food for cattle*)	164
Oil-cloths, floor-cloths, table-covers and furniture-covers; rick-cloths and waggon covers	296
Oiling or lubricating; materials for oiling; oil-cans and lubricators	297
Oils from seeds; animal and vegetable oils, fatty and oily matters	299
Oils of tar, bitumen and resin; naphtha, paraffine, &c.; mineral oils; hydro-carbons; phosphorus	301

	Page
Oleaginous distillation — (*see distilling*)	116
Oleaginous seeds and nuts,–extracting oil from — (*see oils from seeds*)	299
Omnibuses — (*see carriages*)	64
Open fire-grates — (*see fire-places*)	160
Opening and preparing fibres for spinning — (*see spinning*)	413
Opening cases or boxes — (*see boxes*)	45
Opening doors and gates — (*see doors*)	119
Opening metallic cases of preserved meat — (*see preserving food*)	337
Opening or unstoppering bottles — (*see bottles*)	42
Opening windows and shutters — (*see windows*)	503
Operating chairs for dentists — (*see dentistry*)	113
Operating or driving machinery — (*see propelling*)	355
Optical instruments; telescopes, microscopes, stereoscopes, lenses; optical illusions	303
Optical telegraphs — (*see signals*)	400
Ordnance or cannons — (*see fire-arms*)	153
Ores of metals — (*see metals*)	256
Organs and harmoniums — (*see musical instruments*)	292
Ornamenting glass — (*see glass*)	191
Ornamenting metallic surfaces — (*see metals*)	271
Ornaments and architectural mouldings — (*see mouldings*)	291
Orthopedic apparatus for treatment of spinal diseases — (*see surgery*)	449
Oscillating steam-engines — (*see steam-engines*)	436
Ottomans or couches — (*see furniture*)	179
Ovens and kilns	304
Overwinding in mine shafts,–prevention of — (*see mining*)	275
Oxidation and incrustation (preventing and removing)	306
Oxides and metallic salts — (*see metallic salts*)	255
Oxychlorides — (*see chlorine*)	85
Oxygen — (*see gas*)	183
Oysters,–tongs for gathering — (*see fishing*)	162
Ozonized bread, biscuits and cakes — (*see bread*)	47

	Page
Pack saddles — (*see harness*)	211
Packets of needles — (*see pins*)	325
Packing axles, journals and bearings — (*see axles*)	27
Packing cases — (*see boxes*)	45
Packing for joints — (*see joining*)	231
Packing for pistons — (*see pistons*)	331
Packing for pumps — (*see pumps*)	365
Packing for steam-engines — (*see steam-engines*)	436
Packing for valves — (*see valves*)	464
Packing or baling goods — (*see presses*)	339
Padding for horse collars, saddles and harness — (*see harness*)	211
Paddle wheels and float boards — (*see propelling*)	350
Pads or blotting pads — (*see books*)	35
Pails and tubs — (*see cisterns*)	86
Painting, colouring and varnishing; paints, colours, varnishes, glazes and lacquer	308
Palisades and railings — (*see fences*)	143
Pamphlets — (*see books*)	35
Panels for doors — (*see doors*)	119
Pans used in cooking — (*see cooking*)	102
Pans used in dyeing — (*see dyeing*)	126
Pans used in making salt — (*see salt*)	386
Paper, pasteboard and papier mâché; paper hangings	311
Paper bags — (*see bags*)	30
Papering needles — (*see pins*)	325
Papering or making up goods for sale — (*see presses*)	339
Papier mâché — (*see paper*)	311
Paraffine — (*see oils of tar*)	301
Parasols and sun shades — (*see umbrellas*)	461
Parcel books — (*see books*)	35
Parquet flooring — (*see building*)	57
Parts of lamps — (*see lamps*)	237
Pass tickets — (*see stamps*)	425
Passenger registers — (*see measuring progress*)	252
Passing air or gas through melted metal — (*see air-supplying*)	17
Paste for making porcelain — (*see earthenware*)	129
Pasteboard — (*see paper*)	311
Pastry and biscuits — (*see bread*)	47
Patterns in intaglio,–producing — (*see engraving*)	135
Patterns in relief,–producing — (*see embossing*)	134
Paving, road-making and cleansing; pavements; scouring stone floors	316
Pearl barley,–decorticating, husking or peeling — (*see thrashing*)	456
Pearls,–artificial — (*see bones*)	35
Peas,–decorticating — (*see thrashing*)	456
Peas and beans,–crushing — (*see grinding corn*)	198
Peat	318
Pedal actions and key boards — (*see musical instruments*)	292
Pedomotive carriages — (*see carriages*)	64
Peeling or stripping flax for spinning — (*see spinning*)	413
Pegs of twisted wire — (*see nails*)	293
Pelts — (*see leather*)	243
Pelvic truss supports — —(*see surgery*)	449
Pencils and pencil-cases — (*see pens*)	318
Pens, penholders, pencils and pencil-cases	318
Pens for cattle, cattle stalls — (*see stables*)	424
Pepper and salt sprinklers — (*see plates*)	333
Perforating, boring and rifling — (*see boring*)	39
Perforating tunnels — (*see excavating*)	137
Perfumery, perfume cases — (*see hair-dressing*)	209
Perfuming — (*see disinfecting*)	114
Periodicals and newspapers,–folding — (*see books*)	35
Permanent way of railways — (*see railways*)	372
" Perpetual movement " — (*see motive-power*)	290
Perry and cider — (*see brewing*)	50
Petroleum — (*see oils of tar*)	301

	Page
Petticoats, skirts, stays, crinolines, dress suspenders, collars, shawls, muffs, ladies' fans	319
Phormium tenax,–preparing and spinning — (*see spinning*)	416
Phosphatic minerals used as manure — (*see manure*)	247
Phosphorus — (*see oils of tar*)	301
Photography and photographic apparatus	321
Pianofortes — (*see musical instruments*)	292
Pickers for looms — (*see weaving*)	494
Picking cotton for spinning — (*see spinning*)	413
Picking up ships' boats — (*see ships' boats*)	395
Pickle frames — (*see plates*)	333
Pickles, sauces and condiments — (*see preserving food*)	337
Pictures, portraits and miniatures; picture-frames	322
Piercing, drilling or boring — (*see boring*)	39
Piers and breakwaters — (*see docks*)	117
Pigeon shooting	323
Pilasters or standards — (*see pillars*)	324
Pile driving and drawing	323
Pile fabrics,–manufacture of — (*see weaving*)	490
Piling paper removed from printing machines — (*see printing*)	344
Pillars, columns, posts, slabs, vases; statuary	324
Pillows and cushions — (*see upholstery*)	462
Pills, pill making machines — (*see medicines*)	253
Pins and gudgeons for rudders — (*see steering*)	442
Pins and needles	325
Pipe and cigar lights — (*see matches*)	249
Pipes, tubes and syphons; tobacco-pipes; joining pipes	326
Pipes for smoking — (*see tobacco*)	459
Pistols, pistol locks — (*see fire-arms*)	153
Pistons and piston packings	331
Pistons for pumps — (*see pumps*)	365
Pitch chains — (*see chains*)	81
Pitch chains for working road rollers — (*see paving*)	316
Pits and mines — (*see mining*)	275
Placing spills in clamps for making matches — (*see matches*)	249
Plain and fancy weaving — (*see weaving*)	485
Plaiting or folding woven fabrics— (*see finishing*)	150
Planing, planes, planing machines — (*see cutting*)	104
Planking the bodies of hats — (*see hats*)	212
Plants,–apparatus for training — (*see horticulture*)	228
Plants, trees, sea-weeds, &c. (*treatment of*)	332
Plaster and mastic — (*see cement*)	79
Plaster castings — (*see casting plastic*)	77
Plate, spoons, &c. — (*see knives*)	236
Plate printing machines — (*see printing*)	344
Plates, dishes, cups and saucers; salt cellars, trays, cruet-frames	333
Plates of artificial teeth — (*see dentistry*)	113
Plates or sheets of iron and steel, metallic plates — (*see metals*)	265
Plating metals — (*see metals*)	271
Playing games of skill and chance — (*see games*)	182
Pleasure boats and yachts — (*see ship-building*)	390
Ploughing, digging, clod-crushing, land-rolling, harrowing; agricultural implements; tilling and cultivating land	334
Plugs and safety valves — (*see gauges*)	190
Plugs and stop cocks — (*see valves*)	464
Plumbago — (*see metallic salts*)	255
Plungers used for stirring, agitating and mixing — (*see mixing*)	279
Pneumatic apparatus used in manufacturing processes — (*see air-supplying*)	17
Pneumatic message tubes — (*see railways*)	372
Pneumatic motive-power — (*see air-engines*)	9
Pneumatic springs — (*see springs*)	423
Pocket books — (*see books*)	35
Pocket knives — (*see knives*)	236
Pointing or registering in printing machines — (*see printing*)	344
Points and switches for railways — (*see railways*)	374
Polarizing kaleidoscopes — (*see optical instruments*)	303
Poles, posts and pillars — (*see pillars*)	324
Poles for supporting hops — (*see horticulture*)	228
Polishing and smoothing surfaces — (*see grinding, sharpening*)	201
Polishing boots and shoes — (*see boots*)	37
Polishing or giving a face to woven fabrics and yarns, — (*see finishing*)	150
Pomades — (*see hair-dressing*)	209
Pontoons — (*see bridges*)	54
Porcelain and china ware — (*see earthenware*)	129
Port hole lights — (*see windows*)	503
Port holes of ships — (*see ship-building*)	390
Portable fire-escapes — (*see fire-engines*)	159
Portable fountains — (*see watering*)	477
Portable steam-boilers — (*see steam-boilers*)	427
Portfolios — (*see books*)	35
Portmanteaus — (*see boxes*)	45
Portmonnaies — (*see purses*)	370
Portraits and miniatures — (*see pictures*)	322
Postage stamps — (*see stamps*)	425
Posts and pillars — (*see pillars*)	324
Potash and salts of potash — (*see alkalies*)	24
Potatoes,–preserving and peeling — (*see preserving food*)	337
Pottery and porcelain — (*see earthenware*)	129
Pouches and bags — (*see bags*)	30
Pouches for holding tobacco — (*see tobacco*)	459
Poultry and game,–preserving — (*see preserving food*)	337
Pouncing hats — (*see hats*)	212
Powder flasks and boxes — (*see gunpowder*)	203
Powders for cleaning boiler tubes—(*see steam-boilers*)	433
Powders for removing incrustations — (*see oxidation*)	306
Powders used in washing — (*see soap*)	411
Power hammers — (*see hammers*)	210
Power indicators in stationary machines — (*see governors*)	194
Power looms — (*see weaving*)	485
Practising to play on musical instruments — (*see musical instruments*)	292
Preparation of sulphur — (*see sulphur*)	448

	Page
Preparing drugs for medicines — (*see medicines*)	253
Preparing fibres for spinning — (*see spinning*)	413
Preparing for dyeing — (*see dyeing*)	126
Preparing roots as cattle food — (*see food for cattle*)	164
Presenting cards for distribution — (*see cards*)	64
Preservative compounds for animals — (*see medical treatment*)	253
Preserving and hardening wood, metal, stone, skins and other substances	336
Preserving and preparing articles of food, curing bacon, cutting and mincing meat; sauces, condiments and pickles; paring cucumbers; stoning raisins	337
Preserving fermented liquors — (*see brewing*)	50
Preserving life from fire — (*see fire-engines*)	159
Preserving life in case of shipwreck — (*see buoys*)	60
Presses, compressing, packing and arranging	339
Pressing and folding woven fabrics — (*see finishing*)	150
Pressing irons or smoothing irons — (*see mangling*)	246
Pressure of fluids,–regulating the — (*see valves*)	464
Preventing accidents — (*see accidents*)	1
Preventing blight in plants — (*see horticulture*)	228
Preventing escape of gas — (*see gas-burners*)	186
Preventing oxidation, incrustation, scale and rust — (*see oxidation*)	306
Preventing smoke — (*see smoke*)	406
Preventing the deviation of compasses — (*see compasses*)	97
Printing and transferring; type and other surfaces for printing; composing and distributing type	344
Printing messages by electricity — (*see telegraphs*)	451
Privies and water-closets — (*see water-closets*)	476
Probing for balls or projectiles — (*see surgery*)	449
Producing cold — (*see condensing*)	98
Producing electricity — (*see electricity*)	131
Producing fibres from rags — (*see fibres*)	144
Producing fresh water — (*see filtering*)	140
Producing heat — (*see heating*)	215
Producing light — (*see lamps*)	237
Producing optical illusions — (*see dramatic effects*)	122
Producing raised devices — (*see embossing*)	134
Producing vacuum — (*see air-supplying*)	17
Progress of carriages, ships and locomotives,–measuring the — (*see measuring progress*)	252
Projectiles for fire-arms — (*see shot*)	397
Promoting combustion — (*see air-supplying*)	11
Promoting generation of dry steam — (*see steam-boilers*)	427
Propelling, driving, working; transmitting power and motion; converting movements	350
Propelling air into furnaces — (*see air-supplying*)	11
Protecting from injury — (*see accidents*)	1
Protecting metallic surfaces from oxidation — (*see oxidation*)	306
Protecting ships' sheathing — (*see coating*)	93
Protecting stamps and labels — (*see stamps*)	425
Protecting the eyes from wind — (*see surgery*)	449
Public distribution of cards — (*see advertising*)	7
Publicity,–obtaining — (*see advertising*)	7
Puddling and refining metals — (*see metals*)	256
Pulley and chain gearing for lifting — (*see hoists*)	223
Pulleys — (*see wheels for machinery*)	498
Pulleys or sheaves for ships' blocks — (*see ships' rigging*)	395
Pulp for making paper — (*see paper*)	311
Pulp made from wood — (*see wood*)	507
Pulpits — (*see furniture*)	179
Pulverising or crushing minerals — (*see grinding minerals*)	199
Pumps; pumping and raising water and other liquids; pump pistons and packings; ships' pumps; turbines; beer-engines	365
Punching and perforating — (*see boring*)	39
Purifying air for purposes of ventilation — (*see ventilation*)	470
Purifying gas — (*see gas*)	183
Purifying oils — (*see oils from seeds*)	299
Purifying water — (*see filtering*)	148
Purpurine — (*see dyes*)	128
Purses and fastenings	370
Pyrometers — (*see thermometers*)	455
Pyrotechny — (*see fire-works*)	162
Quality and strength of materials,–testing the — (*see testing*)	454
Quality of fluids,–testing the — (*see thermometers*)	455
Quantity and size,–measuring and gauging — (*see measuring length*)	250
Quarries, quarrying stone — (*see mining*)	275
Quarries, tiles and bricks — (*see bricks*)	53
Quilting or stitching — (*see sewing*)	386
Quoins or wedges for fixing type in chases — (*see printing*)	344
Rabbit traps — (*see insects*)	230
Racks for mangers — (*see stables*)	424
Racks for pens and pencils — (*see pens*)	318
Racks or holders for bottles — (*see bottles*)	42
Racks or holders for brooms — (*see brushes*)	56
Racks or holders for whips — (*see harness*)	211
Rafts — (*see ship-building*)	390
Rags and waste; separating fibres from fabrics	370
Railings and fences — (*see fences*)	143
Railway breaks and buffers — (*see breaks*)	48
Railway engines or locomotives — (*see steam-engines*)	436
Railway signals — (*see signals*)	400
Railway tickets — (*see stamps*)	425
Railway wheels and wheel tire — (*see wheels for carriages*)	496
Railways and railway carriages	372
Raising and lowering window-blinds — (*see window-blinds*)	502
Raising carriage heads — (*see carriages*)	64
Raising or lifting heavy bodies — (*see hoists*)	223
Raising steam — (*see steam-boilers*)	427
Raising water and other liquids — (*see pumps*)	365

	Page
Raisins,–washing and cleaning — (*see preserving food*)	337
Rakes used in cultivating land—(*see ploughing*)	334
Rakes used in hay making — (*see reaping*)	381
Range firing,–instructing soldiers in — (*see fire-arms*)	153
Ranges and stoves — (*see fire-places*)	160
Ratchet levers — (*see vices*)	473
Raw hides — (*see leather*)	243
Razors — (*see knives*)	236
Reading and arithmetic, — apparatus for teaching — (*see calculating*)	62
Reaping, mowing, making hay	381
Receipt stamps — (*see stamps*)	425
Receipts and bills — (*see cheques*)	84
Receivers or reels for needles —(*see pins*)	325
Receiving motion from fluids — (*see propelling*)	350
Receiving or recording instruments for electric telegraphs — (*see telegraphs*)	451
Receiving signals — (*see signals*)	400
Receptacles for bottles — (*see bottles*)	42
Receptacles or cases for cigars — (*see tobacco*)	459
Reciprocating motions for machinery — (*see propelling*)	355
Reckoning or calculating apparatus — (*see calculating*)	62
Reclamation of land — (*see ploughing*)	334
Recording instruments for telegraphs — (*see telegraphs*)	451
Recovering fibres from rags — (*see fibres*)	144
Recovering lees in making soap — (*see soap*)	411
Recovering oils from waste — (*see oils from seeds*)	299
Rectifying spirituous liquors and alcohol — (*see distilling*)	115
Red colouring matters — (*see dyes*)	128
Reducing or crushing minerals — (*see grinding minerals*)	199
Reducing rags into pulp — (*see rags*)	370
Reducing the pressure of gas — (*see gas-burners*)	186
Reduction of metals — (*see metals*)	256
Reeds used in looms for weaving — (*see weaving*)	494
Reefing and furling ships' sails — (*see ships' rigging*)	395
Reel frames for winding — (*see winding*)	500
Reels or receivers for needles — (*see pins*)	325
Refining and hardening metals — (*see metals*)	256
Refining sugar — (*see sugar*)	446
Reflectors for lamps; reflection of light	382
Refrigerators, ice safes, cooling apparatus — (*see condensing*)	98
Refuse used as manure — (*see manure*)	247
Register fire-grates — (*see fire-places*)	160
Registering the number of passengers in vehicles — (*see measuring progress*)	252
Registering variations in the atmosphere — (*see thermometers*)	455
Registering votes in deliberative assemblies — (*see measuring length*)	250
Regulating and transmitting electric currents — (*see telegraphs*)	451
Regulating draft in furnaces, stoves, &c. — (*see air-supplying*)	11
Regulating "jupons" — (*see petticoats*)	319
Regulating or adjusting movements — (*see propelling*)	354
Regulating or governing railway signals — (*see signals*)	400
Regulating speed of stationary machines — (*see governors*)	194
Regulating temperature — (*see heating*)	215
Regulating the flow of fluids — (*see valves*)	464
Regulating the supply of food to cattle — (*see stables*)	424
Regulators and gauges — (*see gauges*)	190
Regulators for gas apparatus — (*see gas-burners*)	186
Reins and bridles — (*see harness*)	211
"Relays" for electric telegraphs — (*see telegraphs*)	451
Releasing from harness — (*see harness*)	211
Relief designs,–producing — (*see embossing*)	134
Relief valves — (*see valves*)	464
Removing cardboards from the folds of fabrics — (*see finishing*)	150
Removing impurities from metals — (*see metals*)	256
Removing incrustation, oxidation and corrosion — (*see oxidation*)	306
Removing knobs and burls from woollen cloth — (*see finishing*)	150
Removing mud from beds of rivers, &c. — (*see excavating*)	137
Removing paper from printing machines — (*see printing*)	344
Removing snow and ice from streets — (*see paving*)	316
Removing the contents from sugar machines — (*see sugar*)	446
Removing wool or hair from skins of animals — (*see leather*)	243
Rendering buildings secure from fire — (*see waterproof*)	479
Rendering fabrics waterproof and airproof — (*see waterproof*)	479
Rendering innocuous the momentum of heavy bodies — (*see accidents*)	1
Rendering sewing-machines noiseless — (*see sewing*)	386
Repairing highways, roads or walks — (*see paving*)	316
Repairing houses — (*see building*)	57
Repairing ships, boats and other vessels — (*see ship-building*)	390
Repairing straps or driving belts — (*see straps*)	445
"Repeaters" for electric telegraphs — (*see telegraphs*)	451
Repeating fire-arms — (*see fire-arms*)	153
Repositories for grain — (*see thrashing*)	456
Reproducing or making copies — (*see copying*)	103
Reservoirs and cisterns — (*see cisterns*)	86
Resin — (*see tar*)	451
Resinous oils — (*see oils of tar*)	301
Respirators, respiratory apparatus — (*see medicines*)	253
Rest for books — (*see books*)	35
Retarding and stopping locomotives and carriages — (*see breaks*)	48

	Page
Retorts and crucibles	382
Reversible waistcoats — (*see wearing-apparel*)	483
Reversing motion in stationary engines — (*see governors*)	194
Revivers and fire-lighters — (*see fuel*)	167
Revivifying charcoal — (*see charcoal*)	83
Revolving fire-arms — (*see fire-arms*)	153
Revolving shutters — (*see windows*)	503
Ribbon looms — (*see weaving*)	492
Ribs for umbrellas — (*see umbrellas*)	461
Rice husking — (*see thrashing*)	456
Rick-cloths — (*see oil-cloths*)	296
Riding belts — (*see belts*)	33
Rifles and pistols — (*see fire-arms*)	153
Rifling and boring — (*see boring*)	39
Rims of hats — (*see hats*)	212
Ringing bells — (*see bells*)	32
Rivets and nails — (*see nails*)	293
Rivetting metallic sheets — (*see metals*)	265
Road conveyances — (*see carriages*)	64
Roads and highways, steam road rollers — (*see paving*)	316
Roasting coffee — (*see coffee*)	96
Rocking horses — (*see toys*)	460
Rods of pistons — (*see pistons*)	331
Roll tobacco — (*see tobacco*)	459
Roller-blinds — (*see window-blinds*)	502
Rollers and cylinders — (*see cylinders*)	109
Rollers and mounts for pictures — (*see pictures*)	322
Rolling land, land rollers, clod crushers — (*see ploughing*)	334
Rolling metals — (*see metals*)	265
Roof pavement — (*see paving*)	316
Roofing and plastering, roofs of buildings — (*see building*)	57
Roofs of furnaces — (*see furnaces*)	171
Rooms in buildings — (*see building*)	57
Roots,–preparing for cattle food — (*see food for cattle*)	164
Ropes, cordage, twine, oakum, wire ropes	384
Ropes for bells — (*see bells*)	32
Ropes of wire — (*see wire*)	505
Rotary brushes — (*see brushes*)	56
Rotary engines worked by steam — (*see steam-engines*)	436
Rotary heels for boots and shoes — (*see boots*)	37
Rotary knife cleaners — (*see knives*)	236
Rotary pumps — (*see pumps*)	365
Rotary screens and sieves — (*see sifting*)	399
Rotary spaders or digging machines — (*see hammers*)	210
Rouching, manufacture of rouches — (*see mangling*)	246
Roughing or shoeing horses — (*see horse-shoes*)	227
Roving fibrous materials — (*see spinning*)	417
Rowing boats on water — (*see propelling*)	350
Rubbing or dressing printers' type — (*see printing*)	344
Rubbing ropes, cords or twines — (*see ropes*)	384
Rubbish,–removing from streets — (*see paving*)	316
Rudders for ships — (*see steering*)	442
Rugs and mats — (*see upholstery*)	462
Rules for taking measurements — (*see measuring length*)	250
Ruling paper — (*see copying*)	103
Ruling pens — (*see pens*)	318
Rust or oxidation,–prevention of — (*see oxidation*)	306
Saccharine fluids — (*see sugar*)	446
Sack tackles or hoists — (*see hoists*)	223
Sacks and bags — (*see bags*)	30
Saddles and bridles — (*see harness*)	211
Safes and strong boxes — (*see locks*)	245
Safety apparatus for preventing accidents — (*see accidents*)	1
Safety bridles for horses — (*see harness*)	211
Safety plugs and gauges — (*see gauges*)	190
Sails for ships — (*see ships' rigging*)	395
Saline or salty substances — (*see salt*)	386
Salinometers — (*see thermometers*)	455
Salmon,–methods of capturing — (*see fishing*)	162
Salt and saltpetre	386
Salt sprinklers, pepper and spice sprinklers— (*see plates*)	333
Salt water fish,–conveying — (*see fishing*)	162
Salts of soda, potash and ammonia — (*see alkalies*)	24
Sand and glass papers — (*see grinding, sharpening*)	201
Sand crushing apparatus — (*see grinding minerals*)	199
Saponaceous compounds — (*see soap*)	411
Sarrusophones — (*see musical instruments*)	292
Sarsaparilla — (*see medicines*)	253
Sashes and sash frames — (*see windows*)	503
Saucepans and kettles — (*see cooking*)	102
Saucers and cups — (*see plates*)	333
Sauces and pickles — (*see preserving food*)	337
Saving fuel — (*see smoke*)	406
Saving life and property from fire — (*see fire-engines*)	159
"Saving" or covering the lists of cloth in dyeing — (*see dyeing*)	126
Sawing, saw-benches, saws — (*see cutting*)	104
Saxophones — (*see musical instruments*)	292
Scaffolding for building — (*see building*)	57
Scale board — (*see wood*)	507
Scale or incrustation,–removing — (*see oxidation*)	306
Scales and tangs for table knives — (*see knives*)	236
Scales and weighing machines — (*see weighing*)	496
Scarfs and neck-ties — (*see shirts*)	396
Scarfs and railway rugs — (*see wearing-apparel*)	483
School slates — (*see calculating*)	62
Scissors and shears — (*see knives*)	236
Scouring and washing fabrics, yarns and materials — (*see washing*)	473
Scouring or cleaning grain — (*see thrashing*)	456
Scouring woollen stuffs — (*see finishing*)	150
Scrap iron and steel — (*see metals*)	256
Scrapers for cleaning boiler tubes — (*see steam-boilers*)	433
Screening or sifting — (*see sifting*)	399
"Screw gill boxes" — (*see spinning*)	416
Screw propellers — (*see propelling*)	350

	Page
Screw wrenches or spanners — (*see vices*)	473
Screwing down piles — (*see pile driving*)	323
Screws, cutting screws, blanks for screws — (*see nails*)	293
Scutching fibrous materials — (*see spinning*)	413
Scythes — (*see reaping*)	381
Sea batteries — (*see fortifications*)	165
Sea sickness,–preventing — (*see medicines*)	253
Sea walls — (*see docks*)	117
Sea-water,–distilling and purifying — (*see filtering*)	148
Sea-weeds — (*see plants*)	332
Seal or dip pipes — (*see pipes*)	326
Sealing letters, seals and monograms — (*see stamps*)	425
Seamless tubes — (*see pipes*)	326
Seats for valves, valve seats — (*see valves*)	464
Seats or chairs — (*see furniture*)	179
Securing artificial teeth in metal plates — (*see dentistry*)	113
Securing bales or packages — (*see presses*)	339
Securing bayonets on fire-arms—(*see bayonets*)	32
Securing buildings from fire — (*see waterproof*)	479
Securing buttons to wearing-apparel — (*see wearing-apparel*)	483
Securing coal plates on coal cellars — (*see fuel*)	167
Securing door knobs to their spindles — (*see doors*)	119
Securing doors and gates — (*see doors*)	119
Securing "formes" on printing tables — (*see printing*)	344
Securing handles and scales to cutlery — (*see knives*)	236
Securing oils in cans — (*see oils from seeds*)	299
Securing or uniting legging busks — (*see boots*)	37
Securing the contents of bottles — (*see bottles*)	42
Securing the overlapping parts of envelopes — (*see envelopes*)	136
Securing the sheets of fore and aft sails — (*see ships' rigging*)	395
Securing wheels on axles — (*see wheels for carriages*)	496
Sediment,–preventing the adhesion of — (*see oxidation*)	306
Seed and manure drills — (*see sowing*)	412
Seed and nut oil — (*see oils from seeds*)	299
Seeds and grain,–crushing and splitting — (*see grinding corn*)	198
Seeds and grain,–thrashing and hulling — (*see thrashing*)	456
Self-acting carriage breaks — (*see breaks*)	48
Self-acting lubricators — (*see oiling*)	297
Self-acting repeating rifles — (*see fire-arms*)	153
Self-closing taps — (*see valves*)	464
Semolina — (*see grinding corn*)	198
Separating and sorting — (*see sifting*)	399
Separating fibres from plants, &c. — (*see fibres*)	144
Separating grounds in making coffee — (*see extracts*)	139
Separating hairs from hides — (*see leather*)	243
Separating metals from ores and gangues — — (*see metals*)	256
Separating moisture from substances — (*see drying*)	123
Separating or obtaining tar — (*see tar*)	451
Separating the stage from the audience in theatres — (*see dramatic effects*)	122
Serdge de berries,–looms for weaving — (*see weaving*)	485
Service of water — (*see watering*)	477
Serving mustard,–appliances for — (*see plates*)	333
Settees, sofas, couches — (*see furniture*)	179
Setting boilers — (*see steam-boilers*)	427
Setting in motion railway points — (*see railways*)	374
"Setting on" and stop motions for stationary machines — (*see governors*)	194
Setting or grinding cutlery, &c. — (*see grinding, sharpening*)	201
Setting up and arranging pumps — (*see pumps*)	365
Setting up printing type — (*see printing*)	344
Sewage and sewage water,–treating — (*see manure*)	247
Sewers and gutters — (*see drains*)	121
Sewing and embroidering	386
Shackles or joining links — (*see chains*)	81
Shades and sun blinds — (*see window-blinds*)	502
Shades for lamps — (*see lamps*)	237
Shafts and axles — (*see axles*)	27
Shafts or chimneys — (*see flues*)	163
Shale, slate and stone — (*see stone*)	443
Shale oil — (*see oils of tar*)	301
Shanks for boots and shoes — (*see boots*)	37
Shaping and bending metals — (*see metals*)	265
Shaping cask headings — (*see casks*)	72
Shaping cigar bunches — (*see tobacco*)	459
Shaping hats and bonnets — (*see hats*)	212
Shaping or cutting— (*see cutting*)	104
Sharpening and grinding — (*see grinding, sharpening*)	201
Shawls and cloaks — (*see petticoats*)	319
Shearing cloth— (*see finishing*)	150
Shearing metal — (*see cutting*)	104
Shearing sheep, clipping horses	389
Shears and scissors — (*see knives*)	236
Sheathing ships, forts and turrets — (*see coating*)	93
Sheaves for ships' blocks — (*see ships' rigging*)	395
Sheep shearing — (*see shearing*)	389
Sheep wash — (*see medical treatment*)	253
Sheet iron — (*see metals*)	256
Sheets of paper — (*see paper*)	311
Shells and hollow projectiles — (*see shot*)	397
Shields for telegraphic insulators — (*see telegraphs*)	451
Ship and boat building, sheathing, repairing, working, loading and unloading; masts, spars, &c.	390
Ship propulsion — (*see propelling*)	350
Ships' anchors — (*see anchors*)	26
Ships' boats (lowering and disengaging)	395
Ships' cables or ropes — (*see ropes*)	384
Ships' compasses — (*see compasses*)	97
Ships' rigging and sails; reefing and furling sails; ships' rig	395
Ships' rudders — (*see steering*)	442

	Page
Ships' sheathing — (*see coating*)	93
Shirts, collars, wristbands, neck-ties, scarfs, drawers, hose	396
Shocks or concussions,–attenuating the effects of — (*see accidents*)	1
Shoe for piles — (*see pile driving*)	323
Shoes and boots — (*see boots*)	37
Shoes for horses, shoeing horses — (*see horse-shoes*)	227
Shop fronts — (*see show-cases*)	398
Shot, shell, bullets and other projectiles; torpedoes	396
Shovels and fire-irons — (*see fire-places*)	160
Shovels and spades — (*see hammers*)	210
Show-cases, exhibiting goods for sale, shop safes, fronts and counters; name plates, street name indicators	398
Shrinking cloth — (*see finishing*)	150
Shutters and shutter fastenings — (*see windows*)	503
Shuttles and weft forks — (*see weaving*)	493
Shuttles for sewing machines — (*see sewing*)	386
Sickles — (*see reaping*)	381
Side walks — (*see paving*)	316
Sieves — (*see sifting*)	399
Sifting, sorting, separating, sprinkling	399
Signals, alarms, communicating apparatus, conveying sound	400
Silk,–throwing, carding and spinning, — (*see spinning*)	417
Silver — (*see metals*)	256
Silvering looking glasses—(*see looking-glasses*)	246
Singeing woven fabrics — (*see finishing*)	150
Single and double box pickers for looms — (*see weaving*)	494
Singling machine spun yarn for rope making — (*see ropes*)	384
Sinkers for hosiery machines — (*see weaving*)	490
Sinks and gutters — (*see drains*)	121
Size and gum — (*see starch*)	427
Size and quantity,–measuring and gauging — (*see measuring length*)	250
Sizing, sorting according to size — (*see sifting*)	399
Sizing, warping, beaming and preparing yarns for weaving	404
Skates — (*see boots*)	37
Skeins of yarn,–forming — (*see winding*)	500
Skins and hides — (*see leather*)	243
Skipping hoops — (*see games*)	182
Skirts and crinolines — (*see petticoats*)	319
Skylights — (*see windows*)	503
Slabs — (*see pillars*)	324
Slate and stone — (*see stone*)	443
Slate quarries — (*see mining*)	275
Slating or roofing buildings — (*see building*)	57
Sleepers and chairs for railways — (*see railways*)	372
Slide valves — (*see valves*)	464
Slides and boxes for books — (*see books*)	35
Slides of steam-engines — (*see steam-engines*)	436
Sliding sash frames and shutters — (*see windows*)	503
Slippers and slipper fronts — (*see boots*)	37
Slivering fibrous materials, cotton slivers — (*see spinning*)	417
Slop pails — (*see cisterns*)	86
Sloping roofs for collecting and storing rain water — (*see building*)	57
Slotting, planing and cutting — (*see cutting*)	104
Slubbing fibrous materials — (*see spinning*)	417
Small arms — (*see fire-arms*)	153
Smallwares, narrow weaving — (*see weaving*)	492
Smelting and melting metals — (*see metals*)	256
Smelting glass — (*see glass*)	191
Smiths' forges — (*see metals*)	265
Smiths' hearths — (*see furnaces*)	171
Smoke prevention; burning and condensing smoke; saving fuel	406
Smoking pipes — (*see tobacco*)	459
Smoothing and polishing surfaces— (*see grinding, sharpening*)	201
Smoothing irons — (*see mangling*)	246
Snow and ice,–removing from streets — (*see paving*)	316
Soap	411
Sockets of candlesticks — (*see lamps*)	237
Socks and stockings — (*see shirts*)	396
Soda and salts of soda — (*see alkalies*)	24
Soda creams — (*see confectionery*)	101
Soda water — (*see aërating*)	7
Sofa pillows — (*see upholstery*)	462
Sofas and seats — (*see furniture*)	179
Softening fibres for spinning — (*see spinning*)	413
Softening water — (*see filtering*)	140
Soldering metals — (*see metals*)	265
Soles and heels for boots and shoes — (*see boots*)	37
Solitaire studs — (*see buttons*)	62
Solution of malt for brewing,–treatment of the — (*see brewing*)	50
Sorting and separating — (*see sifting*)	399
Sound boards — (*see musical instruments*)	292
Sounding apparatus and logs — (*see measuring progress*)	252
Sowing seeds and distributing manure	412
Spacing and digging roots — (*see ploughing*)	334
Spades and digging machines — (*see ploughing*)	334
Spanners or screw wrenches — (*see vices*)	473
Spars and ships' masts — (*see ship-building*)	390
Speaking tubes — (*see signals*)	400
Speckled threads — (*see threads*)	458
Spectacles and spectacle frames — (*see optical instruments*)	303
Speed indicators and governors for stationary machines — (*see governors*)	194
Speed indicators for ships, locomotives and carriages — (*see measuring progress*)	252
Spelter — (*see metals*)	256
Spent hops,–treatment of — (*see brewing*)	50
Spice boxes — (*see plates*)	333
Spikes and nails — (*see nails*)	293
Spills and cigar lights — (*see matches*)	249
Spinal truss supports — (*see surgery*)	449
Spindles; spindles and flyers	412
Spindles for locks — (*see locks*)	245
Spinning and preparing for spinning	413
Spinning or twisting tobacco — (*see tobacco*)	459
Spirituous distillation, manufacture of spirituous liquors — (*see distilling*)	115
Splints used in surgical operations — (*see surgery*)	449

	Page
Splitting and cutting — (*see cutting*)	104
Sponge	423
Sponge cloths,–weaving by power — (*see weaving*)	485
Spooling or winding on to bobbins — (*see winding*)	500
Spoons and ladles — (*see knives*)	236
Sporting guns — (*see fire-arms*)	153
Spotted threads — (*see threads*)	458
Spreading cut grass, making hay — (*see reaping*)	381
Spreading of fire,–preventing the — (*see accidents*)	1
Spring balances — (*see weighing*)	496
Spring bed bottoms — (*see furniture*)	179
Spring mattresses or beds — (*see upholstery*)	462
Spring shanks for boots and shoes—(*see boots*)	37
Springs	423
Sprinkling — (*see sifting*)	399
Stables, cattle stalls, feeding troughs and racks, nose bags	424
Staining or dyeing — (*see dyeing*)	126
Stair rods — (*see upholstery*)	462
Staircases — (*see building*)	57
Stalls for horses, cattle pens — (*see stables*)	424
Stamps and stamping; seals, monograms, labels and tickets; damping, cancelling and protecting stamps and labels	425
Standards for scales — (*see weighing*)	496
Standards or columns — (*see pillars*)	324
Stands for casks — (*see casks*)	72
Stands for holding ink — (*see inks*)	229
Stands for rock and coal cutting machines — (*see mining*)	275
Stands for umbrellas — (*see umbrellas*)	461
Stands or holders for books — (*see books*)	35
Staples or catches for locks — (*see locks*)	245
Starch, size, glue, gum	427
Starching or stiffening woven fabrics and threads — (*see finishing*)	150
Starting stationary engines — (*see governors*)	194
Station buffers — (*see breaks*)	48
Stationary boilers — (*see steam-boilers*)	427
Stationary steam-engines — (*see steam-engines*)	436
Statuary — (*see pillars*)	324
Stays and skirts — (*see petticoats*)	319
Steam and other boilers; cleansing and preventing incrustation of boilers; water-feeding apparatus for boilers	427
Steam bird or flying steam-engine — (*see steam-engines*)	436
Steam-boiler furnaces — (*see furnaces*)	171
Steam cranes and winches — (*see hoists*)	223
Steam-engines (stationary, locomotive and marine)	436
Steam fire-engines — (*see fire-engines*)	159
Steam hammers — (*see hammers*)	210
Steam jackets for steam-engines — (*see steam-engines*)	436
Steam ploughs — (*see ploughing*)	334
Steam pumps — (*see pumps*)	365
Steam road rollers — (*see paving*)	316
Steam vessels or ships — (*see ship-building*)	390
Steaming and boiling — (*see steam-boilers*)	427
Steel, steelifying iron — (*see metals*)	256
Steel bells — (*see bells*)	32
Steel caps for spinning — (*see spinning*)	417
Steel plate printing — (*see printing*)	344
Steel tire for carriage and railway wheels — (*see wheels for carriages*)	496
Steels and forks — (*see knives*)	236
Steels used for sharpening cutlery, &c. — (*see grinding, sharpening*)	201
Steering or guiding ships, carriages, ploughs, &c.	442
Steps and seats for carriages — (*see carriages*)	64
Stereoscopes — (*see optical instruments*)	303
Stereotypes — (*see printing*)	344
Sticks or walking-sticks — (*see umbrellas*)	461
Stiffening paper — (*see paper*)	311
Stiffening woven fabrics and threads — (*see finishing*)	150
Stillages used in packing presses — (*see presses*)	339
Stills and still worms — (*see distilling*)	116
Stirring and mixing — (*see mixing*)	279
Stirrups — (*see harness*)	211
Stitching — (*see sewing*)	386
Stock for making glue — (*see starch*)	427
Stocking frames — (*see weaving*)	490
Stockings — (*see shirts*)	396
Stocks of fire-arms — (*see fire-arms*)	153
Stocks or machines for fulling — (*see fulling*)	170
Stone and slate, artificial stone and marble; grindstones and millstones	443
Stone quarries — (*see mining*)	275
Stones,–breaking and crushing—(*see grinding minerals*)	199
Stop cocks — (*see valves*)	464
Stoppers for barrels or casks — (*see casks*)	72
Stoppers for closing bottles; capsules and corks —(*see bottles*)	42
Stoppers for ships' cables — (*see chains*)	81
Stopping locomotives and carriages — (*see breaks*)	48
Stopping stationary engines and machines — (*see governors*)	194
Stopping the bleeding of wounds — (*see surgery*)	449
Stopping the ears for sanative purposes — (*see medicines*)	253
Stopping the ends of pipes — (*see pipes*)	326
Storage tanks — (*see cisterns*)	86
Storing and accumulating power — (*see motive-power*)	290
Storing fermented liquors — (*see brewing*)	50
Storing grain, repositories for grain — (*see thrashing*)	456
Storing liquors in casks — (*see casks*)	72
Stoves and grates — (*see fire-places*)	160
Straightening and bending metals — (*see metals*)	265
Straightening fibres for spinning — (*see spinning*)	413
Straightening saws — (*see cutting*)	104
Strains and jerks,–preventing—(*see accidents*)	1
Stranded ships,–raising — (*see hoists*)	223
Straps, driving-bands and belts	445
Straps for garments — (*see buttons*)	62
Straw,–grinding and crushing — (*see grinding minerals*)	199

	Page
Straw, plants and sea-weeds — (*see plants*)	332
Streams of water,–measuring the velocity of — (*see measuring progress*)	252
Street conveyances— (*see carriages*)	64
Street gutters and sinks — (*see drains*)	121
Street lamps — (*see lamps*)	237
Street railways or tramways — (*see railways*)	372
Streets and roads,–paving, repairing and sweeping — (*see paving*)	316
Strength and quality of materials,–testing the — (*see testing*)	454
Strength of fluids,–testing the — (*see thermometers*)	455
Stretchers for umbrellas — (*see umbrellas*)	461
Stretching woven fabrics — (*see finishing*)	150
String or twine — (*see ropes*)	384
Stringed instruments, piano-fortes, &c. — (*see musical instruments*)	292
Strings for hats and bonnets — (*see hats*)	212
Strip or sheet iron — (*see metals*)	256
Stripping or peeling flax for spinning — (*see spinning*)]	413
Strong boxes and safes — (*see locks*)	245
Strontium — (*see metals*)	256
Structures or buildings — (*see building*)	57
Studs and buttons — (*see buttons*)	62
Stuff for making paper — (*see paper*)	311
Stuffing beds and cushions — (*see upholstery*)	462
Stuffing boxes, packings for stuffing boxes — (*see axles*)	27
Stuffing boxes of steam-engines — (*see steam-engines*)	436
Styptical apparatus — (*see surgery*)	449
Subaqueous works, submerged works — (*see docks*)	117
Subduing and extinguishing fires — (*see fire-engines*)	159
Subjecting substances to blast — (*see air-supplying*)	17
Submarine exploration,–apparatus for — (*see buoys*)	60
Submarine lamps — (*see lamps*)	237
Submarine telegraphs —(*see telegraphs*)	451
Submarine tongs for gathering oysters — (*see fishing*)	162
Submerged propellers — (*see propelling*)	350
Substitutes for bristles in brush-making—(*see brushes*)	56
Substitutes for cloth — (*see fabrics*)	140
Substitutes for earthenware — (*see earthenware*)	129
Substitutes for emery paper — (*see grinding, sharpening*)	201
Substitutes for fibres — (*see fibres*)	144
Substitutes for glass — (*see glass*)	191
Substitutes for gutta-percha and india-rubber — (*see gutta-percha, treating*)	204
Substitutes for ivory, horn and bone — (*see bones*)	35
Substitutes for leather — (*see leather*)	243
Substitutes for metals — (*see metals*)	256
Substitutes for oil-cloths — (*see oil-cloths*)	296
Substitutes for paper — (*see paper*)	311
Substitutes for penholders — (*see pens*)	318
Substitutes for stone and marble—(*see stone*)	443
Substitutes for type — (*see printing*)	344
Substitutes for wall papers — (*see paper*)	316
Substitutes for wood —(*see wood*)	507
Sucking and forcing pumps — (*see pumps*)	365
Sudden blows, jerks and strains,–preventing — (*see accidents*)	1
Sugar and syrups; glucose	446
Sulphate of magnesia — (*see alkalies*)	24
Sulphates of zinc, iron, &c.—(*see metallic salts*)	255
Sulphur	448
Sulphuret of carbon — (*see charcoal*)	83
Sulphuric acid — (*see acids*)	6
Summer drinks — (*see brewing*)	50
Sunken ships,–raising — (*see hoists*)	223
Sunshades and parasols — (*see umbrellas*)	461
Superheating steam — (*see steam-boilers*)	427
Supply valves — (*see valves*)	464
Supplying air in corn dressing and cleansing — (*see air-supplying*)	16
Supplying air to furnaces, lamps, &c., — (*see air-supplying*)	11
Supplying and distributing water — (*see watering*)	477
Supplying baths with water — (*see baths*)	31
Supplying beer to consumers — (*see pumps*)	365
Supplying bottles with liquids — (*see bottles*)	42
Supplying furnaces with fuel — (*see furnaces*)	171
Supplying gas to burners — (*see gas-burners*)	186
Supplying ink to pens — (*see pens*)	318
Supplying liquors with an atmosphere of carbonic acid gas — (*see aërating*)	7
Supplying oils or lubricating materials — (*see oiling*)	297
Supplying steam-boilers with water — (*see steam-boilers*)	434
Supporters for articles of dress — (*see belts*)	33
Supporting music-books — (*see musical instruments*)	292
Supporting rails in railway chairs — (*see railways*)	372
Supports, posts and pillars — (*see pillars*)	324
Supports for plants, hop poles — (*see horticulture*)	228
Supports for trusses — (*see surgery*)	449
Surface condensers — (*see condensing*)	98
Surface drainage — (*see drains*)	121
Surfaces for heating and evaporating — (*see heating*)	215
Surfaces for printing — (*see printing*)	344
Surfaces for reflection — (*see reflectors*)	382
Surfaces in intaglio, sunk patterns — (*see engraving*)	135
Surfaces in relief, raised patterns — (*see embossing*)	134
Surgery, surgical instruments, splints and bandages, trusses for hernia; artificial limbs, invalid furniture	449
Surveying and levelling — (*see compasses*)	97
Suspended gas lamps — (*see lamps*)	237
Suspenders for articles of dress — (*see belts*)	33
Suspending pictures — (*see pictures*)	322
Suspension bridges —(*see bridges*)	54
Sweeping carpets and floors —(*see brushes*)	56
Sweeping streets — (*see paving*)	316
Swimming — (*see buoys*)	60
Switches for railways — (*see railways*)	374
Swivels for fishing tackle — (*see fishing*)	162

	Page
Swivels for watches—(*see jewellery*)	230
Symbols used when sending telegraphic messages — (*see telegraphs*)	451
Synchronism among clocks — (*see clocks*)	88
Syrups and saccharine substances—(*see sugar*)	446
T iron, angle iron — (*see nails*)	293
Table covers — (*see oil-cloths*)	296
Table knives — (*see knives*)	236
Tables and chairs — (*see furniture*)	179
Tablets and cards — (*see cards*)	64
Tack driver and carpet stretcher — (*see upholstery*)	462
Tackle for detaching ships' boats— (*see ships' boats*)	395
Tackle for raising and lowering heavy bodies — (*see hoists*)	223
Tackle hooks — (*see chains*)	81
Tackle used in fishing — (*see fishing*)	162
Tacks and nails — (*see nails*)	293
Tailors' work, pressing irons, tailors' trimmings — (*see wearing-apparel*)	483
Taking and registering votes —(*see measuring length*)	250
Taking copies of drawings and writings— (*see copying*)	103
Taking measurements— (*see measuring length*)	250
Taking off paper from printing machines — (*see printing*)	344
Taking up motion in looms — (*see weaving*)	495
Tallow and fatty matters — (*see oils from seeds*)	299
Tallow cups and lubricators — (*see oiling*)	297
Tangs and scales for table knives — (*see knives*)	236
Tanks and reservoirs — (*see cisterns*)	86
Tannic acid — (*see acids*)	6
Tanning, ingredients used in tanning — (*see leather*)	243
Tape leg sizing machines — (*see sizing*)	404
Taper holders — (*see lamps*)	237
Tapers and candles — (*see candles*)	63
Tapers and matches — (*see matches*)	249
Tapestry looms — (*see weaving*)	490
Tappets — (*see weaving*)	485
Tapping cupolas — (*see metals*)	256
Tapping gas mains — (*see gas burners*)	186
Tapping nuts, nut tapping machines—(*see nails*)	293
Tapping or boring —(*see boring*)	39
Taps and valves — (*see valves*)	464
Tar and resin	451
Targets — (*see fire-arms*)	153
Tarring ropes — (*see ropes*)	384
Tarry oils — (*see oils of tar*)	301
Tatties or watering tatties — (*see watering*)	477
Tea, tea-pots, caddies and chests— (*see coffee*)	96
Teaching alphabets and reading — (*see calculating*)	62
Tearing up rags — (*see rags*)	370
Teazing and opening waste — (*see rags*)	370
Teazing wool — (*see spinning*)	416
Teeth, artificial teeth, tooth picks — (*see dentistry*)	113
Teeth for digging machines—(*see ploughing*)	334
Teeth for saws — (*see cutting*)	104
Teeth in wheels for machinery,–forming —(*see wheels for machinery*)	498
Telegraphs (electric); telegraphic printing apparatus	451
Tell-tale alarms — (*see signals*)	400
Tell-tales or machine registers — (*see measuring length*)	250
Temperature,–indicating— (*see thermometers*)	455
Temperature,–regulating — (*see heating*)	215
Temples for looms — (*see weaving*)	494
Tenon cutting machines — (*see cutting*)	104
Tents or marquees — (*see building*)	57
Terry and cut pile fabrics,–manufacture of — (*see weaving*)	490
Testing the strength and quality of materials	454
Testing the strength of fluids — (*see thermometers*)	455
Textile fabrics,–manufacture of—(*see weaving*)	485
Textile materials or fibres,–obtaining, — (*see fibres*)	144
Theatrical exhibitions — (*see dramatic effects*)	122
Thermometers, barometers, pyrometers, salinometers, electrometers; testing the strength of fluids	455
Thinning or chopping out turnips — (*see ploughing*)	334
Thrashing, winnowing, hulling, decorticating, dressing, cleaning, drying, storing and preserving corn, grain, seeds and rice	456
Thread polishing machines — (*see finishing*)	150
Theading needles — (*see pins*)	325
Threads and yarns	458
Threads of screws,–forming the — (*see nails*)	293
Throstles and doubling frames—(*see spinning*)	417
Throwing or twisting silk — (*see spinning*)	417
Tickets and labels — (*see stamps*)	425
"Tie up" used in pattern weaving — (*see weaving*)	485
Ties or bands for bales — (*see presses*)	339
Ties or neck-ties — (*see shirts*)	396
Tiles and bricks — (*see bricks*)	53
Tilling and cultivation of land—(*see ploughing*)	334
"Tilloting" — (*see fabrics*)	140
Tilting barrels or casks — (*see casks*)	72
Timekeepers — (*see clocks*)	88
Tin — (*see metals*)	256
Tinctorial compounds for staining— (*see dyes*)	128
Tinctorial compounds or extracts — (*see extracts*)	139
Tinting, colouring and painting—(*see painting*)	308
Tips for boots and shoes — (*see boots*)	37
Titaniferous iron ores and sands — (*see metals*)	256
Tobacco and snuff; cigars, cigar-holders, pipe and cigar lighters, smoking pipes, tobacco pouches	459
Toe tips for boots and shoes — (*see boots*)	37
Toilet stands — (*see hair-dressing*)	209
Tongless buckles — (*see buttons*)	62
Tongs for gathering oysters — (*see fishing*)	162
Tongues and eyes of shuttles — (*see weaving*)	493
Tonics, tonic biscuits, &c. — (*see medicines*)	253
Tools, hammers, &c. — (*see hammers*)	210
Tools for cutting and milling — (*see cutting*)	104
Tools for screw cutting — (*see nails*)	293
Tools for turning — (*see turning*)	461
Tools used in mining and quarrying — (*see mining*)	275

	Page
Top notches for umbrellas — (*see umbrellas*)	461
Top sails,–reefing and furling — (*see ships' rigging*)	395
Tops and cowls for chimneys — (*see flues*)	163
Toughening metals — (*see metals*)	256
Towels — (*see fabrics*)	140
Towels,–manufacture of — (*see weaving*)	485
Town water supply — (*see watering*)	477
Toys	460
Tracing or making copies — (*see copying*)	103
Tracing paper — (*see paper*)	311
Traction-engines worked by steam—(*see steam-engines*)	436
Traction on railways — (*see propelling*)	353
Training hops and other plants — (*see horticulture*)	228
Trains on railways,–working or propelling — (*see propelling*)	353
Tramways — (*see railways*)	372
Transferring and printing — (*see printing*)	344
Transferring railway engines, &c., from one line to another — (*see railways*)	374
Transhipping cargoes — (*see ship-building*)	390
Transmitting electric currents — (*see telegraphs*)	451
Transmitting power and motion — (*see propelling*)	354
Transmitting signals — (*see signals*)	400
Traps for pigeon shooting —(*see pigeon shooting*)	323
Travelling bags — (*see bags*)	30
Travelling through the air — (*see aërial machines*)	8
Travelling trunks — (*see boxes*)	45
Traversers and adjustments for machinery — (*see propelling*)	355
Trawling, trawl nets — (*see fishing*)	162
Trays for holding pens — (*see pens*)	318
Treadwheels	460
Treatment of diseases — (*see medicines*)	253
Trees and plants — (*see plants*)	332
Trenails — (*see nails*)	293
Trenches and gutters — (*see drains*)	121
Trimmings for harness — (*see harness*)	211
Triturating horny substances — (*see grinding minerals*)	199
"Trombonettes — (*see musical instruments*)	292
Trough water-closets — (*see water-closets*)	476
Troughs for cattle — (*see stables*)	424
Trousers and coats — (*see wearing-apparel*)	483
Trowels for bricklayers — (*see hammers*)	210
Trucks and waggons — (*see carriages*)	64
Trunks and portmanteaus — (*see boxes*)	45
Trusses for hernia, spinal supports—(*see surgery*)	449
Tubes and pipes — (*see pipes*)	326
Tubes or pipes for smoking — (*see tobacco*)	459
Tubes used for speaking through — (*see signals*)	400
Tubs, pails and cisterns — (*see cisterns*)	86
Tubs used in coal pits and mines — (*see mining*)	275
Tubular boilers — (*see steam-boilers*)	427
Tubular cannon — (*see fire-arms*)	153
Tubular fabrics,–manufacture of— (*see weaving*)	485
Tuck creasers or basters for sewing-machines — (*see sewing*)	386
Tuning musical instruments — (*see musical instruments*)	292
Tunnels — (*see excavating*)	137
Turf or peat — (*see peat*)	318
Turning; lathes for turning	461
Turning and reversing motion in stationary engines — (*see governors*)	194
Turning or closing cartridges — (*see cartridges*)	69
Turning over the leaves of music-books — (*see musical instruments*)	292
Turnips,–preparing for cattle food — (*see food for cattle*)	164
Turnstiles or counting apparatus — (*see measuring progress*)	252
Turntables for railways — (*see railways*)	374
Turpentine — (*see oils of tar*)	301
Turrets and forts — (*see fortifications*)	165
Tuyeres — (*see air-supplying*)	11
Twilled or figured fabrics,–manufacture of — (*see weaving*)	485
Twine and cordage — (*see ropes*)	384
Twist lace machines — (*see weaving*)	490
Twisting fibrous materials, doubling yarns — (*see spinning*)	417
Twisting or spinning tobacco — (*see tobacco*)	459
Type, typographic printing — (*see printing*)	344
Umbilical hernia,–trusses for — (*see surgery*)	449
Umbrellas, parasols, umbrella furniture; walking-sticks	461
Uncultivated land,–clearing or grubbing up — (*see ploughing*)	334
Underclothing for gentlemen's wear — (*see shirts*)	396
Underground telegraphs — (*see telegraphs*)	451
Unfermented liquors — (*see brewing*)	50
Unguents and pomades — (*see hair-dressing*)	209
Unhusking rice — (*see thrashing*)	456
"Union flannels" — (*see fabrics*)	140
Union flannels,–manufacture of — (*see weaving*)	485
Uniting brims to hat shapes or foundations — (*see hats*)	212
Uniting or joining — (*see joining*)	231
Unloading ships — (*see ship-building*)	390
Unlocking gates — (*see doors*)	119
Unlocking railway points — (*see railways*)	374
Unstoppering bottles — (*see bottles*)	42
Upholstery (mattresses, beds, cushions, curtains, curtain and stair rods, cornice poles); rugs, mats and matting	462
Upper top sails,–reefing and furling — (*see ships' rigging*)	395
Upright piano-fortes — (*see musical instruments*)	292
Urinals — (*see water-closets*)	476
Vacuum,–producing — (*see air-supplying*)	17
Valances and curtains — (*see upholstery*)	462
Valve closet apparatus — (*see water-closets*)	476
Valves, taps, stop-cocks, plugs; regulating the flow and pressure of fluids	464

	Page
Vaporising hothouses — (*see horticulture*)	228
Vaporising liquids, forming steam — (*see steam-boilers*)	427
Variable indexes for looms — (*see measuring length*)	250
Variation of magnetic needles — (*see compasses*)	97
Variations in the atmosphere,–indicating — (*see thermometers*)	455
Varnishing, varnishes, glazes and lacquer — — (*see painting*)	308
Vases — (*see pillars*)	324
Vases for containing fuel — (*see fuel*)	167
Vaults and cellars — (*see building*)	57
Vegetable food,–preserving and preparing — (*see preserving food*)	337
Vegetable oils — (*see oils from seeds*)	299
Vegetable powder for cleaning boiler tubes — (*see steam-boilers*)	433
Vehicles or carriages — (*see carriages*)	64
Velocipedes — (*see carriages*)	64
Velocity of running or flowing water,–measuring the — (*see measuring progress*)	252
Velvet looms, weaving velvets — (*see weaving*)	490
Veneers — (*see wood*)	507
Venetian blinds — (*see window-blinds*)	502
Vent pegs — (*see valves*)	464
Ventilation; supplying and purifying air for buildings, mines, ships, carriages, &c.	470
Ventral hernia,–trusses for — (*see surgery*)	449
Vermin traps — (*see insects*)	230
Vertical lines,–indicating — (*see compasses*)	97
Vessels or ships — (*see ship-building*)	390
Vestas — (*see matches*)	249
Vests and coats — (*see wearing-apparel*)	483
Viaducts and aqueducts — (*see bridges*)	54
Vices, wrenches, drill-braces, screw-stocks, screw-keys or spanners, cramps, nippers, bench-dogs or hooks	473
Vinegar — (*see acids*)	6
Vines,–apparatus for training — (*see horticulture*)	228
Violet colouring matters — (*see dyes*)	128
Vitrifying metals and other substances — (*see glass*)	191
Volute springs — (*see springs*)	423
Vote registers — (*see measuring length*)	250
Vulcanite, vulcanizing india-rubber — (*see gutta-percha,–treating*)	204
Wadding — (*see fulling*)	170
Waggon covers — (*see oil-cloths*)	296
Waggons and trucks — (*see carriages*)	64
Waistcoats and trousers — (*see wearing-apparel*)	483
Walking-sticks,— (*see umbrellas*)	461
Walks and roads — (*see paving*)	316
Wall papers or paper hangings — (*see paper*)	316
Wallets — (*see bags*)	30
Walls and roofs of buildings — (*see building*)	57
Warming and heating — (*see heating*)	215
Warp ends,–joining — (*see weaving*)	484
Warp fabrics,–manufacture of— (*see weaving*)	490
Warping yarns — (*see weaving*)	484
Wash from distilleries,–treating — (*see distilling*)	115
Washers and nuts — (*see nails*)	293
Washing, cleansing and wringing fabrics, yarns and materials	473
Washing and cleaning currants and raisins — (*see preserving food*)	337
Washing basins — (*see baths*)	31
Washing bottles — (*see bottles*)	42
Washing horses, sheep and cattle — (*see medical treatment*)	253
Washing ores — (*see metals*)	256
Washing powders — (*see soap*)	411
Washing sugar — (*see sugar*)	446
Waste and rags— (*see rags*)	370
Watch chains, swivels and keys — (*see jewellery*)	230
Watches and clocks — (*see clocks*)	88
Water,–purifying — (*see filtering*)	140
Water barrels — (*see casks*)	72
Water-closets, urinals and commodes	476
Water-feeding apparatus for steam-boilers — (*see steam-boilers*)	434
Water level indicators — (*see gauges*)	190
Water meters — (*see meters*)	273
Water tuyeres — (*see air-supplying*)	11
Watering; supplying and distributing water; fountains and wells	477
Waterproof, fireproof and airproof fabrics, buildings, &c.; waterproofing, fireproofing and airproofing	479
Waterwheels and engines; hydraulic motive-power	481
Waxing and dressing thread — (*see finishing*)	150
Waxing warps in the process of weaving — (*see weaving*)	484
Ways and roads — (*see paving*)	316
Weapons of defence — (*see fire-arms*)	153
Wearing-apparel, military outfits; tailors' trimmings	483
Weather gauges — (*see thermometers*)	455
Weaving, braiding, platting; preparing for weaving	484
Wedges or quoins for fixing type in chases — (*see printing*)	344
Weeding land — (*see ploughing*)	334
Weft forks and shuttles — (*see weaving*)	493
Weighing anchors — (*see anchors*)	26
Weighing-machines, scales, indicating weight	496
Welding and soldering metals — (*see metals*)	265
Wells and fountains — (*see watering*)	477
Whalebone — (*see bones*)	35
Whales,–means of killing — (*see fishing*)	162
Wharfs, wharf walls — (*see docks*)	117
Wheat,–grinding and crushing— (*see grinding corn*)	198
Wheat, corn and seed thrashing — (*see thrashing*)	456
Wheelbarrows — (*see carriages*)	64
Wheel gearing — (*see propelling*)	355
Wheel tops for umbrellas — (*see umbrellas*)	461
Wheeled carriages — (*see carriages*)	64
Wheels driven by water, waterwheels — (*see waterwheels*)	481
Wheels for carriages, railway wheels; wheel tire, &c.	496
Wheels for machinery; cog-wheels, pulleys, cams, &c.	498

	Page
Whetting or sharpening cutlery, &c. — (*see grinding, sharpening*)	201
Whips — (*see harness*)	211
White lead — (*see metallic salts*)	255
Wicks for lamps — (*see candles*)	63
Winches and cranes — (*see hoists*)	223
Wind engines, windmills, wind power — (*see air-engines*)	9
Wind guards for chimneys — (*see flues*)	163
Wind instruments, organs, flutes, &c. — (*see musical instruments*)	292
Winding, reeling and balling yarn and thread	500
Winding or raising coals, &c. from mines — (*see mining*)	275
Windlasses — (*see hoists*)	223
Window blinds, sun blinds, fire-screens	502
Window sills — (*see building*)	57
Windows and sashes; window frames and shutters	503
Wine and fermented liquors — (*see brewing*)	50
Wine glasses — (*see glass*)	191
Wipers for cleansing pens, pen-wipers — (*see pens*)	318
Wire healds for loom harness — (*see weaving*)	494
Wire-working; wire ropes; telegraph cables	505
Wood and veneers; artificial wood	507
Wood screws — (*see nails*)	293
Wool,–combing and spinning — (*see spinning*)	417
Woollen cloths,–manufacture of — (*see weaving*)	485
Woollen cuttings or rags — (*see rags*)	370
Working coal mines — (*see mining*)	275
Working electric telegraphs — (*see telegraphs*)	451
Working guns — (*see fire-arms*)	153
Working in quarries — (*see mining*)	275
Working in wire — (*see wire*)	505
Working mouldings — (*see mouldings*)	291
Working or dressing stone and marble — (*see stone*)	443
Working or driving machinery — (*see propelling*)	355
Working or manœuvring ships — (*see ship-building*)	390
Working points on railways — (*see railways*)	374
Working signals — (*see signals*)	400
Working trains on railways — (*see propelling*)	353
Working wood — (*see wood*)	507
Workmen's dwellings — (*see building*)	57
Worsted,–spinning and twisting — (*see spinning*)	417
Worts — (*see brewing*)	50
Wounds and fractures of limbs,–cure of — (*see surgery*)	449
Wraiths used in warping and beaming warps — (*see weaving*)	484
Wrappers or covers for packages, bale covers — (*see presses*)	339
Wrenches — (*see vices*)	473
Wringing and washing machines —— (*see washing*)	473
Wristbands and collars for shirts—(*see shirts*)	396
Writing and drawing — (*see copying*)	103
Writing fluids — (*see inks*)	229
Writing paper — (*see paper*)	311
Xyloidine — (*see gunpowder*)	203
Yachts and pleasure boats — (*see ship-building*)	390
Yards and masts for ships — (*see ship-building*)	390
Yarn doublers — (*see spinning*)	417
Yarns and threads — (*see threads*)	458
Yarns and threads,–polishing and finishing — (*see finishing*)	150
Yeast or barm — (*see brewing*)	50
Zinc — (*see metals*)	256
Zincographic printing — (*see printing*)	344

SYNOPSIS.

Page

ACCIDENTS (*Prevention of*) - - - - - - - - 1

ACIDS AND VINEGAR - - - - - - - - 6

ADVERTISING - - - - - - - - - - 7

AËRATING; AËRATED LIQUIDS; CARBURETTING AIR AND GAS - - 7

AËRIAL MACHINES, AËROSTATION, BALLOONS - - - - - 8

AIR, GAS AND WIND ENGINES AND MILLS; PNEUMATIC MOTIVE-POWER - 9

AIR SUPPLYING, BLOWING, EXHAUSTING; DRAFT AND VENTILATION - 11

I.—Supplying Air to Furnaces, Stoves, Lamps, &c.; Increasing and Regulating Draft; Tuyeres Dampers; Chimney Wind Guards; Heating Blast - - - - - - - - - 11

II.—Supplying Air in Cleansing, Thrashing and Dressing Grain and Seeds - - - - - - - - - - 16

III.—Admitting, Forcing and Exhausting Air for Manufacturing and other Purposes; Air-pumps; Bellows, Fans and other Blowers; Forcing Gas through melted Metal, &c. - - - - - - - 17

IV.—Ventilation; Supplying and Purifying Air for Buildings, Mines, Ships, Carriages, &c. - - - - - - - - 22

ALKALIES; ALKALINE AND EARTHY SALTS; SALTS OF ALUMINA; BARYTA, IODINE AND COMPOUNDS - - - - - - - - - 24

ANCHORS; LOWERING ANCHORS - - - - - - - - 26

AXLES, SHAFTS, BEARINGS, JOURNALS, AXLE-BOXES, PACKINGS FOR AXLES; LUBRICATING AXLES, &c. - - - - - - - - 27

BAGS, BASKETS, SACKS, HOLDERS AND FASTENINGS - - - - 30

BATHS AND BASINS, BATHING APPLIANCES - - - - - - 31

BAYONETS AND SABRES - - - - - - - - - 32

BEE-HIVES - - - - - - - - - - - 32

Page

BELLS; RINGING BELLS - - - - - - - - 32

BELTS, BRACES, GIRTHS AND BANDS - - - - - - 33

BLEACHING AND DECOLOURISING - - - - - - - 33

BOBBINS AND COP-TUBES - - - - - - - - 34

BONES, IVORY, HORN, PEARL AND SUBSTITUTES, ARTIFICIAL PEARLS AND BEADS - - - - - - - - - - 35

BOOKS, ALBUMS, PORTFOLIOS, BOOK COVERS, BOOK SLIDES OR HOLDERS; BOOK-BINDING - - - - - - - - - 35

BOOTS, SHOES, LEGGINGS, SKATES; CLEANING BOOTS - - - - 37

BORING, DRILLING, RIFLING AND PUNCHING; GIMLETS, AUGERS AND BRACE-BITS - - - - - - - - - - 39

BOTTLES AND JARS; STOPPERS, CAPSULES AND CORKS; STOPPERING, CLOSING AND OPENING BOTTLES AND JARS; CORK-SCREWS; BOTTLE-HOLDERS - - - - - - - - - - 42

BOXES, TRUNKS, PORTMANTEAUS, LETTER-BOXES, WORK-BOXES, DRESSING-CASES, CANISTERS - - - - - - - - - 45

BREAD, BISCUITS AND PASTRY; BAKERS' OVENS - - - - 47

BREAKS, SKIDS AND BUFFERS FOR CARRIAGES AND RAILWAYS - - 48

BREWING, FERMENTING, MAKING FERMENTED AND UNFERMENTED BEVERAGES; TREATING MALT AND HOPS - - - - - - 50

BRICKS, TILES AND BUILDING-BLOCKS - - - - - - 53

BRIDGES, VIADUCTS AND AQUEDUCTS - - - - - - 54

BRUSHES AND BROOMS; BRUSHING AND WAXING APARTMENTS - - 56

BUILDING, PLASTERING, FLOORING AND ROOFING; WALLS, CEILINGS AND CORNICES; LADDERS AND BUILDING-STAGES - - - - - 57

BUOYS, MARINE LIGHTS; PRESERVING LIFE AND PROPERTY AT SEA, CONVEYING LINES TO STRANDED VESSELS; SWIMMING, IMPARTING BUOYANCY - - - - - - - - - - 60

	Page
BUTTONS, BUCKLES, STUDS, SLEEVE-LINKS AND OTHER DRESS FASTENINGS	62
CALCULATING, TEACHING, GIVING ANSWERS TO QUESTIONS	62
CAMPHOR	63
CANDLES; TAPERS AND WICKS	63
CARDS, TABLETS AND CARD-CASES	64
CARRIAGES, CABS, OMNIBUSES, WAGGONS, CARTS, TRUCKS, VELOCIPEDES, LOADING AND TIPPING CARTS, &c.	64
CARTRIDGES AND CASES	69
CASKS AND BARRELS; CASK-STANDS; BUNGS; TILTING CASKS	72
CASTING AND MOULDING METALS; MANUFACTURE OF CASTINGS	74
CASTING AND MOULDING PLASTIC MATERIALS; MANUFACTURE OF MOULDED ARTICLES; PLASTIC COMPOSITIONS; MOULDING FUEL	77
CEMENT AND PLASTER; BURNING LIME	79
CEMENTED AND FLOCKED FABRICS; ADHERING ORNAMENTS AND DEPOSITING METAL ON FABRICS OR YARNS	80
CHAINS; CHAIN CABLES; HOOKS, HOOPS, RINGS	81
CHARCOAL, COKE, CARBON, MOULDERS' BLACKING, LAMP BLACK	83
CHENILLE	84
CHEQUES, BILLS, AND RECEIPTS	84
CHLORINE AND CHLORIDES	85
CHURNS, MILK CANS, MAKING CHEESE AND BUTTER	85
CISTERNS, RESERVOIRS, TANKS AND BUCKETS	86
CLOCKS, WATCHES AND OTHER TIMEKEEPERS; WATCH KEYS, CHAINS AND GUARDS	88

Page

COATING, COVERING, PLATING, SHEATHING - - - - - 90

I.—Coating, Plating, Lining and Facing Metallic Surfaces with Metals or other Substances - - - - - - - 90

II.—Coating, Plating, Lining and Facing Glass, Wood, Stone, Plastic Materials, Textile Fabrics, &c. - - - - - - 92

III.—Coating, Sheathing and Facing Ships; Compositions for the purpose - - - - - - - - - 93

IV.—Covering Rollers - - - - - - - - 95

COFFEE, COCOA AND TEA; COFFEE-POTS AND TEA-POTS; TEA CADDIES; TEA CHESTS - - - - - - - - - 96

COFFINS, TOMBSTONES, EMBALMING - - - - - - 96

COINS AND MEDALS; BULLION-BOXES - - - - - - 97

COMBS - - - - - - - - - - - 97

COMPASSES; MEASURING ANGLES; SURVEYING AND LEVELLING; MATHEMATICAL AND ASTRONOMICAL INSTRUMENTS; ASCERTAINING LONGITUDE 97

CONDENSING, COOLING, FREEZING - - - - - - - 98

CONFECTIONERY - - - - - - - - - - 101

COOKING AND APPARATUS USED IN COOKING - - - - - 102

COPYING, TRACING, DRAWING AND WRITING - - - - - 103

CORK; CORKS AND BUNGS - - - - - - - - 104

CUTTING, SAWING, PLANING - - - - - - - 104

I.—Cutting, Sawing, Planing, &c. Metal, Stone, Wood, Cork and Slate - 104

II.—Cutting Paper, India-rubber and Tobacco; Cutting and Splitting Leather and Cloth - - - - - - - - 107

CYLINDERS, ROLLERS, DRUMS; COVERING ROLLERS - - - - 109

DENTISTRY; ARTIFICIAL TEETH, TOOTH PICKS - - - - - 113

DISINFECTING, DEODORIZING, PERFUMING - - - - - - 114

DISTILLING AND RECTIFYING - - - - - - - 115

I.—Alcoholic Distillation; Manufacture of Spirituous Liquors - - 115

II.—Bituminous, Resinous and Oleaginous Distillation - - - 116

	Page
Docks, Harbours, Breakwaters, Piers, Landing-stages, Canals, Sea-walls, Submarine Works, Weirs	117
Doors and Gates; Door Furniture	119
Drains, Sewers, Gutters; Drain Pipes and Tiles; Draining; Stench Traps, Sinks	121
Dramatic and Scenic Effects, Illusory Exhibitions, Stage Scenery, Float Lights	122
Drying, Expressing Moisture	123
Dyeing Textile Fabrics, Yarns and Materials; Fixing Colours; Mordants	126
Dyes and Printing-colours	128
Earthenware and Porcelain; Pottery Kilns; Potters' Glazes; Ceramic Wares; Terra Cotta	129
Electricity, Galvanism and Magnetism, and their Application	131
Electro-plating and Galvanizing; Depositing Metal by Electricity	134
Embossing, Producing raised Patterns	134
Enamelling, Enamels	135
Engraving and Etching, Producing Sunk Devices	135
Envelopes	136
Excavating and Dredging; Tunnels and Embankments	137
Extracts and Decoctions	139
Fabrics; Elastic Fabrics	140
Feathers; Artificial Feathers and Flowers	142
Fences and Railings	143
Fibres (*Obtaining from Plants, Recovering from Manufactured Goods, Separating, Cleansing, Packing*)	144
Files and Clips	148

Page

FILES AND RASPS - - - - - - - - - 148

FILTERING, PURIFYING AND CLARIFYING LIQUIDS; FILTERS; DISTILLING WATER; SOFTENING WATER - - - - - - - 148

FINISHING, DRESSING, SINGEING, SHEARING, FOLDING AND PRESSING WOVEN FABRICS, YARNS, &c.; CUTTING FUSTIANS - - - 150

FIRE-ARMS, GUNS, ORDNANCE, GUN-CARRIAGES, TARGETS, RIFLE-PRACTICE - 153

FIRE-ENGINES; FIRE-ESCAPES; EXTINGUISHING FIRES - - - 159

FIRE-PLACES, GRATES AND STOVES; FENDERS AND FIRE-GUARDS - - 160

FIRE-WORKS - - - - - - - - - - 162

FISHING; FISHING NETS, FISH HOOKS, OYSTER RAKES - - - 162

FLUES AND CHIMNEYS; CHIMNEY TOPS; CURING SMOKY CHIMNEYS; CHIMNEY WIND GUARDS - - - - - - - - 163

FOOD FOR CATTLE; FODDER-CUTTING; CHAFF-CUTTING; ROOT PULPING - 164

FORTIFICATIONS, BATTERIES, SHIPS OF WAR, GUN-BOATS, ARMOUR PLATED SHIPS - - - - - - - - - - - 165

FUEL; TREATING COAL; PREPARING FIRE-WOOD; FIRE-LIGHTERS - - 167

FULLING AND FELTING; FELTED FABRICS; FLOCK, WADDING - - 170

FURNACES AND FIRE-BOXES; SUPPLYING FURNACES WITH FUEL - - 171

FURNITURE:—BEDSTEADS, TABLES, CHAIRS, CRADLES AND NURSING-APPARATUS; CASTORS; BEDSTEAD-BOTTOMS; DESKS - - - - 179

GAMES AND EXERCISES; BILLIARDS AND BAGATELLE - - - - 182

GAS, GASOMETERS, HOLDERS AND RETORTS; OXYGEN - - - - 183

GAS AND OTHER BURNERS AND REGULATORS; GAS FITTINGS; LIGHTING GAS; PREVENTING ESCAPE OF GAS - - - - - - 186

GAUGES, SAFETY PLUGS, WATER LEVEL INDICATORS - - - - 190

GLASS; APPLICATIONS OF GLASS - - - - - - - 191

Page

GLOVES - - - - - - - - - - - - 193

GOVERNORS AND INDICATORS OF SPEED AND POWER FOR STATIONARY ENGINES AND MACHINERY; STARTING, STOPPING AND REVERSING APPARATUS; MACHINERY-BREAKS - - - - - - 194

GRINDING AND CRUSHING CORN, GRAIN, SEEDS, &c.; DRESSING FLOUR; MILLSTONES; DECORTICATING GRAIN, GRINDING DRIED MEAT - - 198

GRINDING AND CRUSHING MINERALS, CLAY, FIBROUS PLANTS, &c.; BREAKING STONE - - - - - - - - - - 199

GRINDING AND SHARPENING; FLAT GRINDING AND POLISHING; GRINDING-SURFACES; EMERY, SAND AND GLASS PAPERS AND CLOTHS - - 201

GUNPOWDER AND EXPLOSIVE COMPOUNDS; POWDER FLASKS; XYLOIDINE - 203

GUTTA-PERCHA AND INDIA-RUBBER (*Preparing, Treating, Vulcanizing*) - - 204

GUTTA-PERCHA AND INDIA-RUBBER AS APPLIED IN VARIOUS MANUFACTURES 204

HAIR-DRESSING AND PERFUMERY - - - - - - - 209

HAMMERS, AXES, PICKS, SPADES, TROWELS - - - - 210

HARNESS, SADDLES, CURBS, WHIPS; RELEASING FROM HARNESS; SHEARING AND GROOMING HORSES; NOSE-BAGS - - - - - 211

HATCHING EGGS - - - - - - - - - 212

HATS, CAPS, BONNETS, LADIES' CAPS, CAP-FRONTS; COVERINGS FOR THE HEAD, HEAD DRESSES, HEAD ORNAMENTS - - - - - 212

HEATING AND EVAPORATING; REGULATING HEAT - - - - 215

HOISTS, CRANES, CAPSTANS, WINDLASSES; RAISING, LOWERING AND MOVING HEAVY BODIES; RAISING FROM MINES; RAISING SUNKEN SHIPS - - - - - - - - - - - 223

HORSE-SHOES, SHOEING HORSES - - - - - - - 227

HORTICULTURE, CONSERVATORIES, LAWN MOWING, TRAINING PLANTS - 228

INKS AND INKSTANDS - - - - - - 229

Page

INSECTS AND VERMIN (*destroying*) - - - - - - - 230

JEWELLERY, LOCKETS, BROOCHES, BRACELETS, WATCH CHAINS, SWIVELS AND KEYS - - - - - - - - - - 230

JOINING, JOINTING, COUPLING; PIPE JOINTS, RAILWAY JOINTS, FURNITURE JOINTS AND HINGES; PACKING FOR JOINTS - - - - - 231

KNIVES, FORKS, SPOONS, SCISSORS, SHEARS; CLEANING KNIVES, FORKS AND SPOONS - - - - - - - - - - 236

LAMPS, LANTERNS, CHANDELIERS, CANDLESTICKS; LAMP FURNITURE, GLASSES AND SHADES; LIGHTING, PRODUCING LIGHT - - - 237

LEATHER, SKINS AND HIDES; ARTIFICIAL LEATHER AND PARCHMENT; CURRYING, TANNING, CUTTING AND ORNAMENTING LEATHER - - 243

LOCKS, LATCHES, BOLTS, LOCK FURNITURE; KEYS, SAFES, STRONG BOXES 245

LOOKING GLASSES AND FRAMES - - - - - - - 246

MANGLING, IRONING, GOFFERING, ROUCHING - - - - - 246

MANTEL-PIECES - - - - - - - - - - 247

MANURE; TREATING SEWAGE - - - - - - - 247

MAPS AND CHARTS - - - - - - - - - 249

MATCHES, FUSES, PIPE AND CIGAR LIGHTS - - - - - 249

MEASURING AND GAUGING LENGTH, SIZE AND QUANTITY; LOOM AND OTHER MACHINE REGISTERS; APPOINTMENT AND DATE INDICATORS; VOTE REGISTERS - - - - - - - - - 250

MEASURING AND REGISTERING PROGRESS OF LOCOMOTIVES, CARRIAGES AND SHIPS; CARRIAGE TURNSTILES, REGISTERS AND COUNTING APPARATUS; LOGS AND SOUNDERS; MEASURING AND INDICATING FLOW OF STREAMS - - - - - - - - - - 252

MEDICAL TREATMENT OF ANIMALS; WASHING, DIPPING AND SMEARING - 253

MEDICINES AND CURATIVE APPARATUS; MEDICAL BATHS; INHALING AND RESPIRATORY APPARATUS - - - - - - - 253

Page

METALLIC SALTS AND OXIDES - - - - - - - 255

METALS - - - - - - - - - - - - 256

I.—Smelting, Extracting and Reducing Metals; Treating Ores; Refining, Tempering and Annealing Metals; Manufacture of Iron and Steel; Metallic Alloys - - - - - - - 256

II.—Casting and Moulding Metals; Moulds and Core-boxes - - 263

III.—Forging, Rolling, Hammering, Rivetting, Bending, Welding and Shaping Metals; Steam Hammers, Anvils - - - - 265

IV.—Cutting, Planing, Punching, Boring and Rifling Metals - - 269

V.—Plating and Coating Metallic Surfaces with Metal; Finishing and Ornamenting Metallic Surfaces - - - - - 271

METERS FOR GAS AND FLUIDS - - - - - - - 273

MINING; BORING AND BLASTING ROCK; RAISING FROM MINES, GETTING COALS; DRAINING, LIGHTING AND VENTILATING MINES; SINKING WELLS - - - - - - - - - - 275

MIXING, MASHING, STIRRING, AGITATING - - - - - - 279

MOTIVE-POWER MACHINES; OBTAINING MOTIVE-POWER - - - 280

I.—Air, Gas and Wind Engines and Mills; Pneumatic Motive-power - 280

II.—Steam-engines (*Stationary, Locomotive and Marine*) - - - 283

III.—Water-wheels and Engines; Hydraulic Motive-power - - - 288

IV.—Electro-magnetic Engines; Electro Motive-power - - - 290

V.—Mechanical Motive-power, Horse-power - - - - - 290

MOULDINGS AND ARCHITECTURAL ORNAMENTS - - - - - 291

MUSICAL INSTRUMENTS AND NOTATION; TURNING OVER LEAVES OF MUSIC; MUSIC STOOLS, DIGITORIUMS - - - - - - - 292

NAILS, SPIKES, BOLTS, RIVETS, SCREWS, NUTS, WASHERS AND DIES; ANGLE IRON, T IRON, BRACKETS - - - - - - - 293

OIL-CLOTHS, FLOOR-CLOTHS, TABLE-COVERS AND FURNITURE-COVERS; RICK-CLOTHS AND WAGGON-COVERS - - - - - - - 296

OILING OR LUBRICATING; MATERIALS FOR OILING; OIL-CANS AND LUBRICATORS - - - - - - - - - 297

OILS FROM SEEDS; ANIMAL AND VEGETABLE OILS; FATTY AND OILY MATTERS - - - - - - - - - - 299

OILS OF TAR, BITUMEN AND RESIN; NAPHTHA, PARAFFINE, &C.; MINERAL OILS; HYDRO-CARBONS, PHOSPHORUS - - - - 301

Page

Optical Instruments, Telescopes, Microscopes, Stereoscopes, Lenses; Optical Illusions - - - - - - - - - 303

Ovens and Kilns - - - - - - - - - 304

Oxidation and Incrustation (*Preventing and Removing*) - - - - 306

Painting, Colouring and Varnishing; Paints, Colours, Varnishes, Glazes and Lacquer - - - - - - - - 308

Paper, Pasteboard, and Papier-mâché; Paper-hangings - - - 311

I.—Making Paper, Papier-mâché, Preparing Pulp, &c. - - - 311

II.—Cutting, Folding and Ornamenting Paper and Papier-mâché; Applications of Paper - - - - - - - - 314

III.—Paper-hangings - - - - - - - - 316

Paving, Road Making and Cleansing; Pavements; Scouring Stone Floors - - - - - - - - - 316

Peat - - - - - - - - - - 318

Pens, Penholders, Pencils and Pencil-cases - - - - - 318

Petticoats, Skirts, Stays, Crinolines, Dress Suspenders, Collars, Shawls, Muffs, Ladies' Fans - - - - - - 319

Photography and Photographic Apparatus - - - - - 321

Pictures, Portraits and Miniatures; Picture-frames - - - 322

Pigeon Shooting - - - - - - - - - 323

Pile-driving and Drawing - - - - - - - 323

Pillars, Columns, Posts, Slabs, Vases; Statuary - - - 324

Pins and Needles - - - - - - - - - 325

Pipes, Tubes and Syphons; Tobacco Pipes; Joining Pipes - 326

Pistons and Piston Packings - - - - - - 331

Plants, Trees, Sea-weeds, &c. (*Treatment of*) - - - - - 332

Page

PLATES, DISHES, CUPS AND SAUCERS; SALT CELLARS, TRAYS, CRUET FRAMES - - - - - - - - - - - 333

PLOUGHING, DIGGING, CLOD-CRUSHING, LAND-ROLLING, HARROWING; AGRICULTURAL IMPLEMENTS; TILLING AND CULTIVATING LAND - - 334

PRESERVING AND HARDENING WOOD, METAL, STONE, SKINS AND OTHER SUBSTANCES - - - - - - - - - 336

PRESERVING AND PREPARING ARTICLES OF FOOD, CURING BACON, CUTTING AND MINCING MEAT, SAUCES, CONDIMENTS AND PICKLES, PARING CUCUMBERS, STONING RAISINS - - - - - - - - 337

PRESSES; COMPRESSING, PACKING AND ARRANGING - - - - 339

PRINTING AND TRANSFERRING; TYPE AND OTHER SURFACES FOR PRINTING; COMPOSING AND DISTRIBUTING TYPE - - - - - - 344

PROPELLING, DRIVING, WORKING; TRANSMITTING POWER AND MOTION; CONVERTING MOVEMENTS - - - - - - - - - 350

I.—Propelling Ships; Locomotion on Water, Propellers, Paddle-wheels and Screws - - - - - - - - - 350

II.—Propelling Carriages; Locomotion on Land - - - - - 353

III.—Driving Machinery, Ploughs and Pumps; Feed Motions, Guides, Adjustments and Traversers; Transmitting Power and Motion; Cranks and Gearing - - - - - - - - 354

PUMPS; PUMPING AND RAISING WATER AND OTHER LIQUIDS; PUMP PISTONS AND PACKINGS; SHIPS' PUMPS; TURBINES; BEER ENGINES - 365

PURSES AND FASTENINGS - - - - - - - - 370

RAGS AND WASTE; SEPARATING FIBRES FROM FABRICS - - - 370

RAILWAYS AND RAILWAY CARRIAGES - - - - - - 372

I.—Permanent Way, Rails, Rail-joints, Chairs and Sleepers; Portable Railways, Atmospheric Railways, Tramways - - - 372

II.—Railway Switches, Points, Crossings and Turntables - - - 374

III.—Railway Carriages; Coupling, Uncoupling and Altering Position of Carriages and Engines - - - - - - - - 376

IV.—Railway Buffers and Breaks; Retarding and Stopping Trains, Preventing Collisions, &c. - - - - - - - - 378

REAPING, MOWING, MAKING HAY - - - - - - - - 381

REFLECTORS FOR LAMPS; REFLECTION OF LIGHT - - - - - 382

Page

RETORTS AND CRUCIBLES - - - - - - - - 382

ROPES, CORDAGE, TWINE, OAKUM, WIRE ROPES - - - - - 384

SALT AND SALTPETRE - - - - - - - - - 386

SEWING AND EMBROIDERING - - - - - - - 386

SHEARING SHEEP, CLIPPING HORSES - - - - - - 389

SHIP AND BOAT BUILDING, SHEATHING, REPAIRING, WORKING, LOADING AND UNLOADING; MASTS, SPARS, &c. - - - - - - 390

SHIPS' BOATS (*Lowering and Disengaging*) - - - - - - 395

SHIPS' RIGGING AND SAILS; REEFING AND FURLING SAILS; SHIPS' RIG - 395

SHIRTS, COLLARS, WRISTBANDS, NECKTIES, SCARFS, DRAWERS, HOSE - 396

SHOT, SHELL, BULLETS AND OTHER PROJECTILES; TORPEDOES - - 397

SHOW-CASES, EXHIBITING GOODS FOR SALE, SHOP SAFES, FRONTS AND COUNTERS; NAME PLATES, STREET NAME INDICATORS - - - 398

SIFTING, SORTING, SEPARATING, SPRINKLING - - - - - 399

SIGNALS, ALARMS, COMMUNICATING APPARATUS, CONVEYING SOUND - 400

SIZING, WARPING, BEAMING AND PREPARING YARNS FOR WEAVING - 404

SMOKE PREVENTION; BURNING AND CONDENSING SMOKE; SAVING FUEL 406

SOAP - - - - - - - - - - - - 411

SOWING SEEDS AND DISTRIBUTING MANURE - - - - - 412

SPINDLES; SPINDLES AND FLYERS - - - - - - - 412

SPINNING AND PREPARING FOR SPINNING - - - - - - 413

I.—Opening, Ginning, Breaking and Cleaning Fibrous Materials - - 413

II.—Carding, Combing and Heckling Fibrous Materials; Making Cards - 416

III.—Roving, Slubbing, Spinning, Twisting, Doubling and Throwing Fibrous Materials - - - - - - - - 417

Page

SPONGE - - - - - - - - - - - - 423

SPRINGS - - - - - - - - - - - - 423

STABLES, CATTLE STALLS, FEEDING TROUGHS AND RACKS, NOSE BAGS - 424

STAMPS AND STAMPING; SEALS, MONOGRAMS, LABELS AND TICKETS; DAMPING, CANCELLING AND PROTECTING STAMPS AND LABELS - - 425

STARCH, SIZE, GLUE, GUM - - - - - - - - 427

STEAM AND OTHER BOILERS; CLEANSING AND PREVENTING INCRUSTATION OF BOILERS; WATER-FEEDING APPARATUS FOR BOILERS - - 427

I.—Constructing Steam and other Boilers; Generating and Superheating Steam; Preventing Boiler Explosions - - - 427

II.—Cleansing and Preventing Incrustation of Boilers; Purifying the Water - - - - - - - - - 433

III.—Water-feeding Apparatus for Boilers; Heating Feed-water - - 434

STEAM-ENGINES (*Stationary, Locomotive and Marine*) - - - - - 436

STEERING OR GUIDING SHIPS, CARRIAGES, PLOUGHS, &c. - - 442

STONE AND SLATE, ARTIFICIAL STONE AND MARBLE; GRINDSTONES AND MILLSTONES - - - - - - - - - - 443

STRAPS, DRIVING-BANDS AND BELTS - - - - - - 445

SUGAR AND SYRUPS; GLUCOSE - - - - - - - 446

SULPHUR - - - - - - - - - - 448

SURGERY, SURGICAL INSTRUMENTS, SPLINTS AND BANDAGES, TRUSSES FOR HERNIA; ARTIFICIAL LIMBS, INVALID FURNITURE - - - 449

TAR AND RESIN - - - - - - - - - 451

TELEGRAPHS (*Electric*); TELEGRAPHIC PRINTING APPARATUS - - 451

TESTING THE STRENGTH AND QUALITY OF MATERIALS - - - 454

THERMOMETERS, BAROMETERS, PYROMETERS, SALINOMETERS, ELECTROMETERS; TESTING THE STRENGTH OF FLUIDS - - - - 455

Page

THRASHING, WINNOWING, HULLING, DECORTICATING, DRESSING, CLEANING, DRYING, STORING AND PRESERVING CORN, GRAIN, SEEDS AND RICE 456

THREADS AND YARNS - - - - - - - - - 458

TOBACCO AND SNUFF; CIGARS, CIGAR-HOLDERS, PIPE AND CIGAR LIGHTERS; SMOKING PIPES; TOBACCO POUCHES - - - - - - 459

TOYS - - - - - - - - - - - 460

TREADWHEELS - - - - - - - - - - 460

TURNING; LATHES FOR TURNING - - - - - - - 461

UMBRELLAS, PARASOLS, UMBRELLA FURNITURE; WALKING-STICKS - - 461

UPHOLSTERY (*Mattresses, Beds, Cushions, Curtains, Curtain and Stair Rods, Cornice Poles*); RUGS, MATS AND MATTING - - - - - - 462

VALVES, TAPS, STOP-COCKS, PLUGS; REGULATING THE FLOW AND PRESSURE OF FLUIDS - - - - - - - - 464

VENTILATION; SUPPLYING AND PURIFYING AIR FOR BUILDINGS, MINES, SHIPS, CARRIAGES, &c. - - - - - - - - 470

VICES, WRENCHES, DRILL-BRACES, SCREW-STOCKS, SCREW KEYS OR SPANNERS, CRAMPS, NIPPERS, BENCH-DOGS OR HOOKS - - - - 473

WASHING, CLEANSING AND WRINGING FABRICS, YARNS AND MATERIALS - 473

WATER-CLOSETS, URINALS AND COMMODES - - - - - 476

WATERING; SUPPLYING AND DISTRIBUTING WATER; FOUNTAINS AND WELLS - - - - - - - - - - 477

WATERPROOF, FIREPROOF AND AIRPROOF FABRICS, BUILDINGS, &c.; WATERPROOFING, FIREPROOFING AND AIRPROOFING - - - 479

WATERWHEELS AND ENGINES; HYDRAULIC MOTIVE-POWER - - - 481

WEARING-APPAREL, MILITARY OUTFITS; TAILORS' TRIMMINGS - - 483

Page

WEAVING, BRAIDING, PLATTING; PREPARING FOR WEAVING - - 484

I.—Sizing, Warping, Beaming and Preparing Yarns for Weaving - - 484

II.—Weaving Plain, Figured and Double Fabrics; Jacquards and Looms; Woven Fabrics - - - - - - - 485

III.—Weaving Carpets, Velvets and other Pile and Terry Fabrics; Carpet Looms - - - - - - - - - 490

IV.—Knitting; Lace-making; Stocking Frames; Warp Fabrics; Nets and Meshed Fabrics - - - - - - - - 490

V.—Weaving Fringes, Ribbons; Producing Braid; Platting - - 492

VI.—Shuttles and Weft Forks - - - - - - - 493

VII.—Temples, Pickers, Healds and Reeds - - - - - 494

VIII.—Letting-off and Taking-up Motion; Stopping Looms - - - 495

WEIGHING-MACHINES, SCALES, INDICATING WEIGHT - - - - 496

WHEELS FOR CARRIAGES, RAILWAY WHEELS; WHEEL TIRE, &C. - - 496

WHEELS FOR MACHINERY; COG-WHEELS, PULLEYS, CAMS, &C. - - 498

WINDING, REELING AND BALLING YARN AND THREAD - - - 500

WINDOW BLINDS, SUN BLINDS, FIRE-SCREENS - - - - - 502

WINDOWS AND SASHES; WINDOW-FRAMES AND SHUTTERS - - - 503

WIRE-WORKING; WIRE-ROPES; TELEGRAPH CABLES - - - 505

WOOD AND VENEERS; ARTIFICIAL WOOD - - - - - 507

SUBJECT-MATTER INDEX

OF

PATENTS APPLIED FOR AND PATENTS GRANTED,

For the Year 1867.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
ACCIDENTS (*Prevention of*).			
Means of saving life in pits and mines - -	40	7th Jan. 1867	Charles James Pownall.
Construction of seats or chairs suitable for preserving life in case of shipwreck, and also for being used as bathing chairs.	78	11th Jan. 1867	Michael Hodge Simpson.
An improved safety match-box - - - (*Communicated by Henry Arthur Gadsden.*)	124	17th Jan. 1867	Henry Starr.
A new and improved fastener or lock, to be employed for securing the cover enclosing the flame in lamps known as the "Davy," or lamps of a similar description.	137	19th Jan. 1867	John Harding.
An improved construction of steam generator - (*preventing explosions.*) (*Communicated by George Gould.*)	138	19th Jan. 1867	Alfred Vincent Newton.
Safety valves - - - - - -	192	25th Jan. 1867	John Wolstenholme. Edward Holt.
Improvements in the lighting of mines, sewers and other similar subterraneous places in which inflammable and explosive gases may form and collect, and in the lamps or lanterns and other apparatus to be used therewith.	252	30th Jan. 1867	Henry Richardson Fanshawe.
Steam cranes - - - - - -	277	1st Feb. 1867	George Russell.
Improved apparatus or mechanism for supplying steam-boilers with water, and for preventing their explosion.	295	2nd Feb. 1867	Henry Banks Wright.
An improved self-acting safety gun-lock - -	367	9th Feb. 1867	John Stanton.
Apparatus for regulating the supply of water to cisterns, and for preventing the bursting of water pipes.	383	11th Feb. 1867	George Hugh Kidd.
An improved safety apparatus for raising and lowering heavy bodies.	389	12th Feb. 1867	Eugene Henri Bernier.
Certain improvements in steam-boilers or generators (*preventing effects of explosion.*) (*Communicated by John Lochhead and Charles Arthur Mathieu.*)	402	13th Feb. 1867	William Edward Gedge.
Improvements in the application of certain hydrocarbons to the obtainment of light and heat, and in the apparatus or means employed therein. (*Communicated by Adrien Muller and Ignace Mathei.*)	458	20th Feb. 1867	John Henry Johnson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
ACCIDENTS—*continued.*			
Breech-loading fire-arms	460	20th Feb. 1867	Augusto Albini. Francis Augustus Braendlin.
Certain improvements in fluid safety guages for steam-boilers and other pressure and vacuum vessels.	511	25th Feb. 1867	John Marshall.
Certain improvements in lamps (*miners' lamps.*)	525	26th Feb. 1867	George Young.
Generating heat by the admixture and combustion of a hydrocarbon vapour, air and the gaseous components of steam. (*safety tanks.*) (*Communicated by Henry Rutger Foote.*)	560	28th Feb. 1867	Stillman Boyd Allen. Jarius Handy Winsor.
Portable fire-escapes	572	1st March 1867	Ralph Augustine Jones. John Cooper Hedges.
A compound safety disengaging hook	573	1st March 1867	Jubal Charlton Broadbent.
Improvements in self-acting steam and fluid safety gauges, the said improvements being applicable to cocks or taps and valves.	591	2nd March 1867	John Ambrose Coffey.
Improved apparatus for the production or improvement of inflammable gases.	608	5th March 1867	Henri Ulliel.
Hydrocarbon oils used for safety and other lamps	611	5th March 1867	Alexander Septimus Macrae.
Certain improvements in miners' safety lamps	617	5th March 1867	George Rowley.
Safety valves for steam boilers or generators (*Communicated by George William Richardson.*)	643	7th March 1867	Alfred Vincent Newton.
Bridles and reins connected therewith (*Communicated by Samuel Brubaker Hartman.*)	675	9th March 1867	John Garrett Tongue.
Improved safety apparatus for mining cages, hoists and lifts.	754	15th March 1867	John Povey Harper.
Improvements in boilers or steam generators and in valves or plugs connected therewith. (*safety valves.*)	756	16th March 1867	Thomas Cowbarn.
Improvements in setting boilers and in safety valves for the same.	779	18th March 1867	William Henry Parsons.
Certain improvements in safety valves for steam-boilers.	785	19th March 1867	Charles Frederick Cooke.
Construction and arrangement of the connections and casings of lock-up or protected safety valves for steam generating apparatus.	794	19th March 1867	Adam Scott Cameron.
Central-fire cartridges for breech-loading fire-arms (*Communicated by Benjamin Stone Roberts.*)	805	20th March 1867	Marc Antoine François Mennons.
Apparatus for stopping or retarding railway trains	807	20th March 1867	Gilbert Amable Laurent.
Points and crossings of the permanent way of railways and tramways, and the provision of additional safety to the aforesaid points and crossings.	851	23rd March 1867	Charles Menzies Holland.
A new or improved safety carriage or vehicle, comprising an instantaneous unyoking or releasing apparatus, a break and apparatus connected therewith.	875	26th March 1867	Auguste Frédéric Langin.
Locks for fire-arms	881	26th March 1867	Henry George Riggs.
Certain improvements in miners' safety lamps	992	3rd April 1867	Eric Hugo Waldenstrom.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
ACCIDENTS—*continued.*			
Boats - - - - - - (*safety boat.*)	996	3rd April 1867	Théodore Faucheux.
An improved safety-bridle for horses - -	1001	3rd April 1867	Albert Gains Hills.
Fire-escapes - - - - -	1139	18th April 1867	John Scott.
Life boats - - - - - (*Communicated by Albert Lintonner Shears and William Spencer Driggs.*)	1211	26th April 1867	Alexander Melville Clark.
Safety valves and arrangements for preventing damage to or the explosion of steam-boilers. (*Communicated by Murdoch Macpherson.*)	1284	2nd May 1867	Thomas Wood.
Apparatus for securing the sheets of fore and aft sails - - - - - -	1323	6th May 1867	Richard Taylor. Ebenezer Poulson.
A self-acting damper in connection with steam-boilers - - - - - (*check against explosions.*)	1325	6th May 1867	William Schofield. Edmund Smith.
Improvements in explosive compounds, and in the means of igniting the same. (*Communicated by Alfred Nobel.*)	1345	7th May 1867	William Edward Newton.
An improved method of preventing the explosion of steam-boilers and of promoting the generation of dry steam.	1368	9th May 1867	George Henry Cail.
Valves for steam and other fluids - - (*safety valves.*)	1384	10th May 1867	William Bracewell. William Pickup. Benjamin Lund.
Construction of safety lamps for miners - -	1597	29th May 1867	Edward Jones.
Night and fog signal apparatus for preventing accidents on railways.	1651	5th June 1867	Jules Gaudet.
An improved pontoon bridge, also applicable as a life raft and lighter. (*Communicated by John Wright.*)	1723	12th June 1867	John Cochrane.
A new or improved fire-escape - - -	1745	15th June 1867	James Quin.
An improved mechanical arrangement for preventing over-winding in shafts of coal and other mines.	1777	18th June 1867	William Fairley.
Water tuyeres - - - - - (*preventing explosion.*)	1817	21st June 1867	Benjamin Ford. Thomas Ford.
An improved method of protecting submarine cables, when placed on board ship, from injury by design or from damage by accident, and for facilitating the paying of them out.	1856	26th June 1867	Matthew Fontaine Maury.
Breech-loading fire-arms - - - -	1881	27th June 1867	Joseph Rock Cooper.
Miners' lamps - - - - -	1908	29th June 1867	Charles Cosset Dubrulle.
Miners' safety lamps - - -	1938	3rd July 1867	David Pemberton Morison.
Life buoys - - - -	2019	10th July 1867	James Samuel Hood.
An improved self-acting buckle or coupling to be employed for lifting, hoisting or winding at coal-pits or for other similar purposes - -	2025	10th July 1867	William Heyes. William Bevan.
Breech-loading fire-arms - - -	2040	11th July 1867	Edward Hohenbruck.
Improvements in safety apparatus for raising and lowering persons and weights in mines, applicable to other purposes.	2044	12th July 1867	Eugéne Henri Bernier.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
ACCIDENTS—*continued.*			
Improvements in the construction of life boats, and in detaching tackle for boats. (*Communicated by Milton Vorse Nobles, David Decker and William James Dounce.*)	2052	12th July 1867	Alexander Melville Clark.
Safety or relief valves - - - -	2053	12th July 1867	John Pasfield.
Improvements in fire-escapes, the same being suitable for ascending and descending mines or other deep places, and at other times convertible into a piece of furniture, such as a couch, ottoman, chair, table or other similar article.	2069	13th July 1867	John Scott.
Apparatus for preventing accidents at junctions, crossings, and sidings of railways.	2123	20th July 1867	Charles Frederick Whitworth.
Improved apparatus for the prevention of overwinding and falling of the cages used in mine shafts, lifts and hoists.	2144	23rd July 1867	John Marley.
An improved chemical mixture or compound for extinguishing fires and destroying explosive fire-damp in coal mines.	2200	30th July 1867	Joseph Jones.
Miners' safety lamps - - - -	2230	1st Aug. 1867	Samuel Higgs.
Lamps burning with oils and other fluids - - (*to prevent explosion.*) (*Communicated by William Porter.*)	2256	5th Aug. 1867	Joseph Angus.
Construction of boats - - -	2287	8th Aug. 1867	Henry William Withers.
Certain improvements in safety apparatus to be employed for preventing accidents in winding coals and other minerals from mines.	2350	15th Aug. 1867	Edward Ormerod.
Fire-escapes - - - - -	2354	16th Aug. 1867	George Clarke.
Railway carriages - - - -	2381	19th Aug. 1867	Clemens Reifert.
Means of and apparatus for the preservation of life from fire, and for raising or lowering persons or goods from buildings.	2385	20th Aug. 1867	Walter Dixon.
Improvements in an apparatus for preserving life in water, and propelling, floating or manœuvering in water any body, vessel or mechanical contrivance, and for floating or manœuvering in the air any mechanical contrivance.	2397	21st Aug. 1867	John Goucher.
Fire-escapes - - - - -	2509	5th Sept. 1867	Ralph Augustine Jones. John Cooper Hedges.
Construction and fitting up of safety valves for steam-boilers or generators. (*Communicated by George William Richardson.*)	2520	5th Sept. 1867	Alfred Vincent Newton.
Improvements in connection with miners' safety lamps.	2521	5th Sept. 1867	Henry Gardner.
Fire-escapes and ladders - - -	2586	12th Sept. 1867	Christopher Oates.
Fire-arms - - - - - -	2672	21st Sept. 1867	Joseph Rock Cooper.
Improved methods of constructing steam generators for engines, new furnaces connected therewith, and the mode of working them, with machinery in combination with the uses to which they are applicable. (*preventing explosion of hydrocarbons.*)	2792	4th Oct. 1867	Henry Pinkus.
Improvements in mining and other lamps, and in lamp and candle cases and holders.	2818	7th Oct. 1867	Jonathan Aldous Mays.
Gaseliers - - - - -	2840	9th Oct. 1867	William Potts.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
ACCIDENTS—*continued.*			
Improvements applicable to railway trains for the prevention of accidents arising from collisions or other casualties on railways.	2884	14th Oct. 1867	Matthew Fitzpatrick.
An improved mode of and means for preventing the bursting of the tubes in steam and water pressure gauges, and other tubes or pipes, from the effects of cold. (*Communicated by Ernest Dubois.*)	2925	18th Oct. 1867	Edward Casper.
Machinery or apparatus applicable to cages or hoists used in mining or lifting machines.	2934	18th Oct. 1867	John King.
Tuyeres for blast furnaces and other purposes -	2953	21st Oct. 1867	William Barrett. Charles Martin.
Magazines or reservoirs for containing explosive compounds or liquids and gunpowder.	2999	24th Oct. 1867	Edward Matthew Palliser.
An improved apparatus for saving lives and property in case of shipwreck at sea.	3001	25th Oct. 1867	Gregorio Russo. Claudio Alli Maccaroni.
Breech-loading fire-arms - - - -	3075	1st Nov. 1867	Richard Brown Roden.
Apparatus for filling flasks, canisters and other receptacles, with gunpowder.	3078	1st Nov. 1867	George Haycraft.
Construction of safety lamps for mines - -	3181	11th Nov. 1867	Samuel Buxton. William Gardam.
Safety lamps - - - - -	3209	13th Nov. 1867	Joseph Wilson Lowther. Thomas Bennett.
A method of attenuating the effect of shocks or concussions between engines, carriages or waggons composing a railway train.	3223	14th Nov. 1867	Paul de Bavay.
An improved safety lamp suitable for reading and night purposes.	3287	20th Nov. 1867	Henry Greene.
Lamps for burning liquid volatile hydrocarbons -	3296	21st Nov. 1867	Cephas Butler.
Improvements in apparatus for rendering innocuous the momentum of heavy bodies so as to prevent injury and damage from concussion, applicable to ships' cables, cranes, windlasses, capstans, hoists, lifts, weighing machines, ship and fort armour, to training guns, to railway trains, station buffers, fenders to pier-heads, gangways, breakwaters, and other similar structures, which apparatus is also applicable for storing and accumulating power, which may be used for throwing projectiles, raising or moving heavy weights, such as ships, stranded or sunken vessels, propelling carriages and other purposes.	3302	21st Nov. 1867	William Graham McIvor.
Merchants' ships and other vessels and appliances connected therewith. (*life boats.*)	3331	25th Nov. 1867	George Bell Galloway.
Safety cans or vessels for containing, measuring, or storing petroleum oil and other volatile inflammable liquids. - - - -	3344	26th Nov. 1867	James Hinks. Joseph Hinks.
Miners' safety lamps - - - -	3376	28th Nov. 1867	Thomas Story Horn.
An improved mode of protecting submarine cables when placed on board ship, from injury by design or from damage by accident, and for facilitating the paying of them out.	3390	29th Nov. 1867	Mathew Fontaine Maury.
Improvements in miners' safety lamps and in the mode of manufacturing the same.	3427	2nd Dec. 1867	Frederick Foster.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
ACCIDENTS—*continued.*			
Safety apparatus for steam-boilers or steam generators - - - - - -	3472	6th Dec. 1867	John William Kenyon. Robert Arthur Armitstead.
An improved curtain or screen for separating the stages from the audience part in theatres and music halls, in order to prevent the spreading of fire, also applicable to other buildings where it is desired to prevent the spreading of fire from one part of the building to another part.	3523	12th Dec. 1867	George Adam Young.
Apparatus for saving life from drowning - -	3556	14th Dec. 1867	Archibald McMurdo.
Improvements in brattice cloth and in its manufacture.	3561	14th Dec. 1867	John Howard Kidd.
Improved machinery for manufacturing central-fire cartridges.	3633	21st Dec. 1867	James Davidson.
Improvements applicable to the rigging, chains, windlasses, anchors and other parts of ships or vessels, or to collieries, railways, rolling stock or other purposes, to prevent sudden blows, jerks, or strains.	3637	21st Dec. 1867	James Davison.
Construction of miners' safety lamps - -	3640	23rd Dec. 1867	John Rowe.
ACIDS AND VINEGAR.			
Utilizing a certain description of clay and a substance usually found therewith. (*for manufacture of sulphuric acid.*)	551	27th Feb. 1867	Alexander McDougall.
Improvements in separating zinc from certain ores or minerals, and in recovering other substances found therewith. (*sulphuric acid.*)	997	3rd April 1867	Peter Spence.
Treatment and purification of oils. (*and obtaining fatty acids.*) (*Communicated by Felix Asselin.*)	2109	17th July 1867	John Henry Johnson.
Obtaining sulphuric acid from the refuse "pickle" or "liquor" used in wire and galvanizing works.	2259	5th Aug. 1867	William John Pughsley.
Treatment of seaweed for obtaining valuable products from it.	2436	26th Aug. 1867	Edward Sonstadt.
Apparatus for separating soluble from insoluble matters, filtering the solutions, and if wished distilling these latter or parts of them. (*obtaining tannic or gallic acid.*)	2863	11th Oct. 1867	Eduard Leitenberger.
Mode of and apparatus for the reduction of sulphate of iron crystals. (*to obtain sulphuric acid.*) (*Partly communicated by Charles Madge.*)	3217	13th Nov. 1867	Edward Madge.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
ADVERTISING.			
Improved apparatus for containing advertising and address cards for public distribution.	7	1st Jan. 1867	Herbert William Hart.
Ornamenting, printing, cutting, creasing, bending, embossing and manufacturing articles from wood and other materials. (*advertising boards.*)	155	22nd Jan. 1867	Edward Tomlinson.
Construction of boxes or apparatus to contain address cards for public distribution.	226	28th Jan. 1867	Julius Edward Mellin. Clement Henry Ulbricht.
A new or improved apparatus for holding and presenting cards and other articles for distribution.	239	29th Jan. 1867	William Willmer Pocock.
Apparatus for exhibiting advertisements - -	1084	11th April 1867	James Dunbar.
Construction of boxes or apparatus to contain address cards for public distribution.	1144	18th April 1867	Julius Edward Mellin. Clement Henry Ulbricht.
A new and useful mode of advertising - -	2786	3rd Oct. 1867	Ernest Baudesson de Richebourg.
Mode of obtaining publicity and affording information or amusement. (*Communicated by Paul Baudet.*)	3008	25th Oct. 1867	Alexander Melville Clark.
AËRATING; AËRATED LIQUIDS; CARBURETTING AIR AND GAS.			
Cases or receptacles for bottles and similar articles (*for aërated liquids.*)	615	5th March 1867	George Withy. Joseph Francis Cotterell.
Improvements in the means of raising liquids and in apparatus for the same. (*producing carbonic-acid gas.*) (*Communicated by Pierre Léon Margot, jun.*)	1427	14th May 1867	Alexander Melville Clark.
Improving wine on draft, and of apparatus to be used for this object, which invention is also applicable to other liquids. (*supplying with an atmosphere of carbonic-acid gas.*)	1729	13th June 1867	Thomas Symes Prideaux.
Apparatus for the manufacture of iced beverages - (*Communicated by Gustave D. Dows, Adolphe Clarck and Abraham Van Winkle.*)	1875	27th June 1867	William Edward Newton.
Improved apparatus for the manufacture of soda water and other aërated liquids. (*Communicated by John Matthews, jun.*)	1949	3rd July 1867	William Edward Newton.
An improved rack for mineral or aërated waters or other liquids in bottles.	2384	20th Aug. 1867	Walter Burrow.
Apparatus for the aëration of fresh water obtained by the distillation of sea water. (*Communicated by Theodore Perroy.*)	2452	28th Aug. 1867	John Henry Johnson.
An improved portable distilling apparatus for producing fresh aërated water from sea water, part of which said apparatus is also applicable to the burning of hydrocarbon oils for other purposes.	3072	31st Oct. 1867	Alexander Chaplin.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
AËRATING, &c.—*continued.*			
A new and improved process and machinery for the manufacture of soda water and other aërated liquids.	3307	22nd Nov. 1867	Valentine Burchell.
Improvements in the manufacture of soda and other aërated waters, and in the manufacture of aërated bread.	3573	16th Dec. 1867	William Huskisson the younger.
Construction and arrangement of apparatus for carburetting gas and atmospheric air.	3675	27th Dec. 1867	Tristie James Ellis.
AËRIAL MACHINES, AËROSTATION, BALLOONS.			
Improvements in balloons and in arrangements relating thereto. (*Communicated by Henry Giffard.*)	466	20th Feb. 1867	Michael Henry.
An improved means or apparatus to be used for travelling through the atmosphere and on land and water.	473	21st Feb. 1867	Joseph Meyers Kaufmann.
Improvements in propulsion, and in rotary apparatus for giving motion or energy to fluids and receiving motion or energy from them - -	696	11th March 1867	Matthew Piers. Watt Boulton.
Improved apparatus for obtaining motive-power -	1291	3rd May 1867	Henry William Grylls. Henry Neville. Joseph William Brooks. James Holt.
Machinery or apparatus for navigating the air -	1392	10th May 1867	William Smyth.
An improved means or apparatus to be used for travelling through the atmosphere and on land and water, part of which apparatus is equally applicable to other purposes.	1525	22nd May 1867	Joseph Meyers Kaufmann.
New (or improved) means and machinery or apparatus for enabling persons to fly in the air.	1982	6th July 1867	Thomas Craddock.
Apparatus for floating in and travelling through the air - - - - - -	2115	19th July 1867	James William Butler. Edmund Edwards.
Aërial locomotion - - - - -	2149	24th July 1867	Robert Lakin.
Machinery for propelling vessels and aërial conveyances by reaction.	2223	1st Aug. 1867	Richard Boyman Boyman.
Apparatus for conveying passengers and goods through the air.	2229	1st Aug. 1867	James Edward Nelson.
Improvements in an apparatus for preserving life in water, and propelling, floating or manœuvering in water any body, vessel or mechanical contrivance, and for floating or manœuvering in the air any mechanical contrivance.	2397	21st Aug. 1867	John Goucher.
Carrying passengers through the air by a steam bird or flying steam-engine fitted with wings flapped by the action of steam.	2504	4th Sept. 1867	John Kinnersley Smythies.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
AËRIAL MACHINES, &c.—*continued.*			
Improvements in balloons and in apparatus employed in connection therewith. (*Communicated by Henry Giffard.*)	3036	28th Oct. 1867	Michael Henry.
Improved apparatus for obtaining and applying motive-power - - - - - - (*propelling balloons.*)	3087	2nd Nov. 1867	Henry William Grylls. Henry Neville. James Holt.
AIR, GAS AND WIND ENGINES AND MILLS; PNEUMATIC MOTIVE-POWER.			
Obtaining and applying motive-power - -	278	1st Feb. 1867	Isham Baggs.
Machinery for obtaining and applying motive-power. (*Communicated by Gustav Odemar.*)	472	21st Feb. 1867	Edward Griffith Brewer.
Gas engines - - - - - -	499	23rd Feb. 1867	Arthur Kinder. William Barns Kinsey.
An improved mode or means for actuating motive-power engines, and improvements in the apparatus employed therefor.	558	28th Feb. 1867	Andrew McCallum.
Steam and gas engines - - - - - (*Communicated by Charles E. Emery.*)	571	28th Feb. 1867	Alfred Vincent Newton.
Engines worked by heated air and by other suitable heated gas or gases.	633	7th March 1867	Alphonse Louis Normandy.
Applying wind power for working ships' pumps -	727	13th March 1867	John Griffith.
Heated air engines - - - - -	776	18th March 1867	Francis Herbert Wenham.
Machinery for obtaining and giving off motive-power, for the purpose of working the different kinds of machines in any mines, or for hauling, driving or drawing any kind of carriages in mines or other places.	848	23rd March 1867	Loxley Horsfield.
Improvements in machinery employed in getting coal and other minerals, and in tramways to be used therewith, also in engines to be worked by compressed air or other fluid.	886	26th March 1867	George Edmund Donisthorpe.
Engines worked by steam, water and other fluids and gases under pressure.	904	28th March 1867	William Bryer Nation.
An improved air engine so arranged that it may be driven exclusively by the expansion of air, or the heated air may pass through a steam generator and the steam so generated be used in addition to the expanded air, to enhance the pressure upon the piston and thus add to the power of the engine.	924	29th March 1867	Philander Shaw.
Motive-power engines - - - - -	1164	22nd April 1867	John Peebles.
Machinery or apparatus for navigating the air -	1392	10th May 1867	William Smyth.
Rotatory engines and pumps - - -	1529	22nd May 1867	Ebenezer William Hughes. Thomas Howard Head.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
Air Engines, &c.—*continued.*			
Improvements in the production of motive-power and in the apparatus connected therewith. (*air and steam.*) (*Communicated by Jacques Belou.*)	1575	28th May 1867	Henri Adrien Bonneville.
An improved mode of obtaining motive-power and the apparatus employed therein.	1594	29th May 1867	Thomas Edmund Passee.
A new or improved engine or machine for obtaining and applying motive-power.	1604	30th May 1867	James Francombe.
Obtaining motive-power - - - -	1691	8th June 1867	James Hargreaves.
Improvements in engines for boring rock, cutting coal, and boring, cutting or working in other material, and in stands or frames for such engines, the improvements in engines being partly applicable to other purposes.	1704	10th June 1867	Frederick Bernard Dœring.
An improved apparatus for utilizing the power spent in stopping or retarding the motion of carriages and other vehicles and machinery, as also the power produced by carriages and other vehicles when moving down inclines. (*compressing air for accelerating motion.*) (*Communicated by Jules Péan.*)	1762	17th June 1867	Charles Denton Abel.
An improved mode of obtaining motive-power -	1787	19th June 1867	Francis William Waide.
Rotary engines and pumps - - - -	1791	19th June 1867	Ebenezer William Hughes. Thomas Howard Head.
Improvements in actuating motive-power engines and in the apparatus or means employed therefor	1892	28th June 1867	Colin Brown.
Improvements in engines worked by the combustion of inflammable aëriform fluids, and in apparatus for producing such fluids.	2000	8th July 1867	Matthew Piers Watt Boulton.
Safety or relief valves - - - - -	2053	12th July 1867	John Pasfield.
Improvements in the manufacture of gases for the production of light, heat and motive-power, and in apparatus for that purpose.	2180	27th July 1867	Paul Alexander Rohart.
Combined gas and air engines - - - (*Communicated by Eugen Langen and Auguste Nicol Otto.*)	2245	3rd Aug. 1867	Charles Denton Abel.
Improvements in machinery or apparatus for raising or forcing water or other fluids, and for the transmission of the motive-power of water, steam or other fluid or gases.	2278	7th Aug. 1867	Francis Carr Marshall. Hugh Stewart.
Heated air engines - - - -	2346	15th Aug. 1867	Francis Herbert Wenham.
Improved means and apparatus for producing motive-power.	2523	6th Sept. 1867	Noble Seward, M.D.
An improved rotary steam or gas engine, also applicable for pumping and measuring liquids.	2536	7th Sept. 1867	Emile Hubner.
Method of and apparatus for obtaining and applying motive-power.	2633	19th Sept. 1867	William Jeremiah Murphy.
Apparatus for producing motive-power by means of compressed air, water or other liquid. (*Communicated by Jean Ventouillac, Louis Ventouillac and Edouard Lau.*)	2899	16th Oct. 1867	Alexander Melville Clark.
Apparatus for compressing air and for working pneumatic railways.	2978	23rd Oct. 1867	Frederic Seiler.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
AIR ENGINES, &c.—*continued.*			
An improved gas engine - - - - (*Communicated by Jean Mazieres and Jules Trottier.*)	3237	15th Nov. 1867	William Edward Gedge.
Improvements in obtaining motive-power and in apparatus employed therein - - - -	3316	23rd Nov. 1867	George Harrison Bolton. William Whitthread. Edward Bolton. Thomas Robinson.
Improvements in the manufacture of gas, and in the treatment and application of such and other gases for cooking, warming, lighting, generating of steam and other purposes, combined with their use as a motive-power previous to being burned or consumed, and improvements in the apparatus for these purposes.	3318	23rd Nov. 1867	Peter Salmon.
Engines worked by heated air or gas - -	3466	5th Dec. 1867	Arthur Charles Sterry.
Engines actuated by air, steam, or other fluids -	3576	16th Dec. 1867	George Dominicus Kittoe.
Method of and apparatus for raising water - (*windmill.*) (*Communicated by Jan Barend Hendrik Van Royen.*)	3590	17th Dec. 1867	William Armand Gilbee.
Metallic pistons for steam cylinders, air cylinders or pumps.	3685	28th Dec. 1867	Jacob Goodfellow.
Improvements in motors or apparatus for generating motive-power, and in the method of applying the same to produce useful effect. (*Communicated by Benjamin Talbot Babbitt.*)	3690	28th Dec. 1867	William Edward Newton.
See also "GOVERNORS."			
AIR SUPPLYING, BLOWING, EXHAUSTING; DRAFT AND VENTILATION.			
I.—Supplying Air to Furnaces, Stoves, Lamps, &c.; Increasing and Regulating Draft; Tuyeres; Dampers; Chimney Wind Guards; Heating Blast.			
Machinery or apparatus for the prevention of smoke from furnaces used for steam-boilers and other similar purposes.	19	3rd Jan. 1867	Joseph Knowles Broadbent.
Improvements in bakers' and other ovens, and also in scrap and other furnaces.	80	11th Jan. 1867	John Tomlinson.
Vertical furnaces for melting and refining metals -	111	16th Jan. 1867	John Clayton.
Apparatus for consuming smoke, promoting combustion, and feeding furnaces with fuel.	158	22nd Jan. 1867	William Arena Martin.
Puddling and other furnaces for melting, boiling or heating iron - - - - -	210	26th Jan. 1867	John Allcock Jones. Richard Howson.
Improvements in the means and mode of admitting and regulating atmospheric air or vapour to gas-burners.	227	28th Jan. 1867	William Henry Stallard.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
AIR SUPPLYING, &c.—*continued.*			
Improvements in the heating of malt kilns and other apparatus of a similar character, and the warming of the interiors of churches and other large buildings, which invention is also applicable to causing the consumption of smoke from open fire-places.	249	30th Jan. 1867	Thomas Prideaux.
Improvements in the lighting of mines, sewers and other similar subterraneous places in which inflammable and explosive gases may form and collect, and in the lamps or lanterns and other apparatus to be used therewith.	252	30th Jan. 1867	Henry Richardson Fanshawe.
Lime kilns - - - - -	259	30th Jan. 1867	William Lee.
Improvements in furnaces and in the application thereof to boilers or steam generators - -	268	31st Jan. 1867	John Lockwood. Henry Shaw.
Fire-grates and furnaces - - - -	270	31st Jan. 1867	Archibald Craig.
Improvements in steam-boiler, saltpan and other furnaces or fire-places, for the better combustion of fuel.	354	7th Feb. 1867	Herman Eugene Falk.
Machinery for cleaning wheat and other grain -	405	13th Feb. 1867	Samuel Dwight Mack.
Certain improvements in apparatus for preventing "down draught" in chimnies, which may also be applied for the purpose of ventilation.	444	19th Feb. 1867	Charles Wenner.
Improvements in the application of certain hydrocarbons to the obtainment of light and heat, and in the apparatus or means employed therein. (*Communicated by Adrien Muller and Ignace Matheï.*)	458	20th Feb. 1867	John Henry Johnson.
Certain improvements in lamps - - -	525	26th Feb. 1867	George Young.
Improvements in means or apparatus for generating, superheating and condensing steam, and heating or boiling water or other liquids, parts of which are applicable to other purposes -	601	4th March 1867	James Marchent. John Parker.
Manufacture of gas - - - -	624	6th March 1867	John Thompson.
Improvements in the manner of reducing and refining metallic ores, more particularly ores of iron, and in converting iron into steel, and in apparatus to be used in connection therewith.	652	7th March 1867	Silas Covell Salisbury.
Improvements in supplying heated air to furnaces and fires, and in apparatus connected therewith, which apparatus is also applicable to burning smoke - - - - -	741	14th March 1867	William Hamer. Joseph Davies.
Certain improvements in apparatus applicable for the prevention of smoke.	762	16th March 1867	John Grundy.
Improvements in steam-boilers and in apparatus for heating the same, and also for obtaining heat for other purposes.	809	20th March 1867	John Russell Swann.
Hot air stoves for blast furnaces - - -	893	27th March 1867	Richard Howson.
Improvements in the smelting and treatment of iron and other ores, in the fuel and other materials made use of in such treatment, and in apparatus for supplying the same to blast, puddling, and any other furnaces and fires in or by which great heat is required to be generated, parts of which improvements are applicable also to other purposes - - - - - -	922	29th March 1867	Enoch Harrison Aydon. Edward Field.
Blast furnaces or cupolas - - - -	944	30th March 1867	Thomas Prideaux.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
AIR SUPPLYING, &c.—*continued.*			
Construction of register or other open fire-grates -	1061	9th April 1867	Thomas Redmayne. John Sibrey.
Improvements in fire-bars and in the manufacture of the iron to be used in the construction thereof, the iron so manufactured being applicable also to other purposes.	1070	10th April 1867	William Colborne Cambridge.
Apparatus for admitting and regulating the supply of air to furnaces.	1142	18th April 1867	William Begg.
Improvements in apparatus for applying concentrated heat, and suitable for lighting fires, brazing and similar uses.	1149	20th April 1867	John McKechnie.
Manufacture of paper and of the chemical matters employed therein - - - - (*Partly communicated by Ernest Pinchon.*)	1171	22nd April 1867	Charles Townsend Hook. Eustace Hook.
A self-acting damper in connection with steam-boilers - - - - - -	1325	6th May 1867	William Schofield. Edmund Smith.
Improvements in producing and increasing combustion in blast and other furnaces, also for generating steam and for other similar or analogous purposes.	1454	16th May 1867	John Martin Stanley.
Improvements in marine and land boilers and their furnaces, and also other furnaces used for the manufacture of iron and other purposes.	1467	17th May 1867	Simon Regan.
Improvements in the production of motive-power and in the apparatus connected therewith. (*Communicated by Jacques Belou.*)	1575	28th May 1867	Henri Adrien Bonneville.
A new means for procuring the more perfect combustion in the burning of fuel.	1610	30th May 1867	Tony Petitjean.
An apparatus for the purpose of giving sufficient draught to any kind of chimney.	1613	31st May 1867	Floribert Joseph Demanet.
Furnaces for steam-boilers and other uses.	1735	13th June 1867	John Glover.
Improvements in furnaces for consuming smoke, applicable to steam-boilers' and other furnaces.	1814	21st June 1867	William Bellhouse.
Water tuyeres - - - -	1817	21st June 1867	Benjamin Ford. Thomas Ford.
Certain improvements in the construction of water tuyeres.	1823	22nd June 1867	John Onslow. Francis Northall.
Means of consuming smoke in furnaces and other fire-places.	1854	25th June 1867	Gavin Alston.
Means of consuming smoke in furnaces - -	1861	26th June 1867	Richard Pannell Forlong.
Tuyeres for smiths' hearths - - -	1876	27th June 1867	Moses Horrocks Taylor.
Lamps for burning petroleum, shale and other mineral oils.	1910	29th June 1867	Charles Petit.
Improvements in the manufacture of welded tubes and in apparatus employed for that purpose, which latter are partly applicable to other purposes - - - - - -	1937	3rd July 1867	William Galloway. George Plant.
Miners' safety lamps - - - -	1938	3rd July 1867	David Pemberton Morison.
Construction of chimney tops - - -	1990	8th July 1867	Jasper Capper.
Apparatus for producing or increasing the light or heat from carbonized atmospheric air, gas or gaseous mixtures, by the use of hydrocarbons, oils, spirits or other inflammable liquids or any mixture thereof. (*air regulating tubes.*)	2045	12th July 1867	Frederick Wilkins.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
AIR SUPPLYING, &c.—*continued.*			
Steam-boilers and furnaces - - -	2049	12th July 1867	George Sinclair.
An improved arrangement or construction of furnaces to be used for preventing smoke and effecting economy of fuel.	2050	12th July 1867	Charles Titus Higginbotham.
Construction of furnaces employed in the manufacture of glass.	2075	15th July 1867	Francis Dixon Nuttall.
Consuming smoke, economising fuel and generating steam.	2099	17th July 1867	Samuel Cunliffe Lister.
Hot-blast stoves - - - - -	2182	27th July 1867	Humphrey Chamberlain.
Blast furnaces - - - - -	2264	5th Aug. 1867	John Heaton.
Furnaces for steam-boilers and other purposes -	2268	6th Aug. 1867	John Bolland.
Blowers for furnaces and other purposes - -	2324	13th Aug. 1867	Benjamin Franklin Sturtevant.
Kitchen or cooking ranges - - -	2329	13th Aug. 1867	John Badger.
Heated air engines - - - -	2346	15th Aug. 1867	Francis Herbert Wenham.
Fire-grates - - - - -	2494	3rd Sept. 1867	Edward Young Robbins.
Furnaces for melting iron and other metals, and for smelting ores. (*Partly communicated by Heinrich Krigar.*)	2553	9th Sept. 1867	Jacob Eichhorn.
Steam-boiler and other furnaces - - - (*Communicated by Heinrich Krigar and Wilhelm Grote.*)	2562	10th Sept. 1867	Jacob Eichhorn.
Furnaces - - - - - -	2670	21st Sept. 1867	Samuel Cunliffe Lister.
Improvements in apparatus for regulating automatically the supply of gas, air and water, or any one or more of them, to steam-boilers heated by gas or otherwise, and for utilizing the heat of the gases produced or heated by combustion.	2674	23rd Sept. 1867	Charles Ritchie.
Apparatus for the regulation of up and down currents of air in shafts or chimneys.	2677	23rd Sept. 1867	William Cooke.
Lamps - - - - - -	2741	28th Sept. 1867	Ellis Lever.
Improvements in furnaces, fire-places and fire-bars, for the consumption of smoke and gases arising from products, and the non-consumption of fire-bars.	2757	1st Oct. 1867	Thomas Bird.
Improvements in mechanism or arrangements applicable to steam-boilers and their furnaces, the said mechanism or arrangements being especially applicable to those boilers and their furnaces with which gas is the combustible used.	2772	2nd Oct. 1867	Charles Ritchie.
Improvements in heating blast for smelting and other furnaces, and in the apparatus or means connected therewith.	2781	3rd Oct. 1867	Robert Dick.
Improved methods of constructing steam generators for engines, new furnaces connected therewith, and the mode of working them, with machinery in combination with the uses to which they are applicable.	2792	4th Oct. 1867	Henry Pinkus.
Manufacture and refining of iron and steel -	2832	8th Oct. 1867	John Player.
Method of and apparatus for heating - - (*regulating draft in flues.*)	2862	11th Oct. 1867	Robert Alfred Wright.
Improvements in smoke-consuming apparatus for steam-boiler and other furnaces, and in machinery for manufacturing parts of the same.	2871	12th Oct. 1867	Jean Baptiste Pierre Alfred Thierry.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
Air Supplying, &c.—*continued.*			
Tuyeres for blast furnaces and other purposes -	2953	21st Oct. 1867	William Barrett. Charles Martin.
Fans for the ventilation of mines, or for propelling air into furnaces, or for other purposes.	2964	22nd Oct. 1867	Theodore Lemielle.
Apparatus for compressing air and for working pneumatic railways.	2978	23rd Oct. 1867	Frederic Seiler.
Steam generators - - - - - - (*Communicated by S. Lloyd Wiegand.*)	3025	26th Oct. 1867	Alexander Melville Clark.
Furnaces for steam-boilers and other uses - -	3035	28th Oct. 1867	John Glover.
Furnaces - - - - - -	3042	29th Oct. 1867	Edward Brown Wilson.
An improved portable distilling apparatus for producing fresh aërated water from sea water, part of which said apparatus is also applicable to the burning of hydrocarbon oils for other purposes.	3072	31st Oct. 1867	Alexander Chaplin.
Improvements in apparatus to be applied to lamps and burners for the more perfect combustion of carburetted gases - - - - -	3110	5th Nov. 1867	Herbert Allman. Frederic Newton Gisborne.
Apparatus for smoke consuming in steam-boiler and other furnaces - - - -	3139	7th Nov. 1867	Thomas Rothwell Bardsley. William Blackshaw.
Furnaces - - - - - -	3168	9th Nov. 1867	Edward Brown Wilson.
Tuyeres for blast furnaces - - -	3180	11th Nov. 1867	Charles Blakemore Hodgetts.
Furnaces or heating apparatus - - - - (*Communicated by Eugene Alexandre Frederic Goguel.*)	3200	12th Nov. 1867	Clinton Edgcumbe Brooman.
Refining copper - - - - - - (*Communicated by Frederic Le Clerc.*)	3243	15th Nov. 1867	Alexander Melville Clark.
An improved gas furnace - - - -	3245	15th Nov. 1867	Richard Howson.
A new or improved process of and apparatus or furnaces for the manufacture of metal direct from the ore. (*Communicated by Pierre Emile Martin.*)	3264	18th Nov. 1867	Clinton Edgcumbe Brooman.
Improvements in smoke-consuming apparatus, parts of which improvements are applicable to other purposes.	3289	20th Nov. 1867	Joseph Staincliffe.
Cowls or guards for chimney and other like shafts -	3300	21st Nov. 1867	Walter Blundell.
Lamps for burning petroleum and other volatile oils or essences.	3303	21st Nov. 1867	Ernest Thorold.
Means of and apparatus for consuming smoke and economizing fuel in furnaces of steam-boilers and other furnaces.	3314	23rd Nov. 1867	George Douglas Hughes.
An improved arrangement or construction of furnaces to be used for preventing smoke and effecting economy of fuel.	3348	26th Nov. 1867	Charles Titus Higginbotham.
Improvements in miners' safety lamps and in the mode of manufacturing the same.	3427	2nd Dec. 1867	Frederick Foster.
Improvements in utilizing mineral and other oils for generating steam, and in the means or apparatus for effecting the same.	3434	3rd Dec. 1867	John Graham Hope.
Improvements in steam-boiler furnaces and in apparatus connected therewith.	3459	5th Dec. 1867	Daniel Smith.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
Air Supplying, &c.—*continued.*			
Improvements in annealing furnaces and in apparatus to be employed therein, parts of which improvements may be applied to certain other descriptions of furnaces and fires - -	3467	5th Dec. 1867	Matthew Tildesley. James Bird.
Improvements in furnaces and in effecting the combustion of fuel therein.	3468	5th Dec. 1867	Thomas Joseph Leigh.
Lamps to be used under water - - -	3527	12th Dec. 1867	John Ward.
Water tuyeres for blast furnaces, smiths' fires and for other like purposes.	3529	12th Dec. 1867	Rowland William Brownhill.
Construction of chimney tops or caps - - (*preventing down draft.*)	3686	28th Dec. 1867	Jasper Capper.
Improvements in the process of and apparatus for producing heat by the combustion of fuel, for metallurgical and other operations where heat is required, and in the means for utilizing the waste heat from blast furnaces.	3698	30th Dec. 1867	Richard Fothergill.
Apparatus for consuming or preventing the formation of smoke in steam-boiler and other furnaces - - - - - -	3700	30th Dec. 1867	Walter Kendrick. Job Wooldridge.
Improvements in furnaces for smelting glass or the materials employed therein, and for consuming smoke.	3702	30th Dec. 1867	James Davison.
Mode of and apparatus for combining the vapours of liquid hydrocarbons with oxygen and hydrogen, and burning the mixture as fuel. (*Communicated by David Oliver Macomber.*)	3706	31st Dec. 1867	Marc Antoine François Mennons.
Carriage lamps - - - - - -	3711	31st Dec. 1867	William Barnes.
Stoves - - - - - - -	3717	31st Dec. 1867	Nathan Smith.
II.—Supplying Air in Cleansing, Thrashing and Dressing Grain and Seeds.			
Machines for separating foreign seeds and other impurities from wheat, other grain or seeds. (*Communicated by David Monroe Childs.*)	142	19th Jan. 1867	Augustus Bryant Childs.
Machinery for manufacturing flour - - (*Communicated by John Brown, Alexander Hart, Allen Battey Ralph, James Hobart Cutler and Dexter Neuton Knight.*)	838	22nd March 1867	George Tomlinson Bousfield.
Apparatus for grinding corn, grain and other similar substances.	1172	23rd April 1867	Arthur Rigg.
Machinery for drawing and dressing seeds - -	1344	7th May 1867	Charles Burrell.
An improved machine for scouring or cleaning grain. (*Communicated by Peter T. Elting.*)	1346	7th May 1867	William Robert Lake.
Manufacture of flour - - - -	1386	10th May 1867	John Norman. William Hay.
Apparatus for elevating or moving grain, and for weighing and moving grain.	1717	11th June 1867	Stephen Wells Wood.
Improvements in drying wheat and other grain, and pulse and seeds, and in the apparatus employed therein - - - - -	2023	10th July 1867	James Noah Paxman. Henry Matthews Davey.
Improvements in the manufacture of wheat and other grain into flour, and in the machinery connected therewith.	2291	9th Aug. 1867	Thomas James Baker.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
Air Supplying, &c.—*continued.*			
Apparatus used for grinding wheat or other grain -	2230	18th Oct. 1867	Thomas Kitchen.
An improved mode of and apparatus for decorticating and drying corn and other grain.	3424	2nd Dec. 1867	Jonah Hadley.
Improved apparatus for cleaning grain or seeds and reducing the same to meal or flour.	3632	21st Dec. 1867	Jonah Hadley.
III.—Admitting, Forcing and Exhausting Air for Manufacturing and other Purposes; Air-pumps, Bellows, Fans and other Blowers; Forcing Gas through melted Metal, &c.			
An improved pneumatic apparatus for the treatment of diseases in an attenuated atmosphere. (*Communicated by George Hadfield.*)	55	8th Jan. 1867	William Edward Newton.
Improvements in glass blowing and in apparatus therefor. (*Communicated by Léon Bandoux.*)	143	19th Jan. 1867	William Bull.
Improvements in hats and other coverings for the head, and their bodies or foundations or in similar articles, and in the means and appliances for producing the same - -	247	30th Jan. 1867	John Harcourt Brown. William Bull.
An improved mode of raising water by atmospheric pressure, and apparatus connected therewith -	274	1st Feb. 1867	Thomas Cooke, senr. Charles Frederick Cooke.
Atmospheric plates of artificial teeth - -	286	1st Feb. 1867	Nehemiah Taylor Folsom.
Improvements in engines or machinery for boring or working rock and other material, and in stands for such engines. (*constructing pumps for compressing air.*)	296	2nd Feb. 1867	Edward Smith Crease.
Looms for weaving - - - -	314	4th Feb. 1867	Joseph John Harrison.
Preserving meat, poultry and game - -	378	9th Feb. 1867	Edouard Gorges.
Treatment of peat - - - - -	512	25th Feb. 1867	Eugène Chapron.
Means and apparatus for drying hops - -	520	26th Feb. 1867	William Henry Samson.
Boiling and bleaching all kinds of textile fabrics and vegetable fibres and matters.	548	27th Feb. 1867	Murdoch Mackay.
Generating heat by the admixture and combustion of a hydrocarbon vapour, air and the gaseous components of steam - - - - (*air condensing vessel.*) (*Communicated by Henry Rutger Foote.*)	560	28th Feb. 1867	Stillman Boyd Allen. Jairus Handy Winsor.
An improvement in packing and preserving animal size.	607	5th March 1867	John Cowdery Martin.
An improved mode of generating steam - -	645	7th March 1867	John Garrison Woodward.
Actuating fan blowers by steam power - - (*Communicated by George Washington Lemley.*)	646	7th March 1867	William Clark.
Improvements in the manner of reducing and refining metallic ores, more particularly ores of iron, and in converting iron into steel, and in apparatus to be used in connection therewith.	652	7th March 1867	Silas Covell Salisbury.
Improvements in drying threads and fabrics, and in combining apparatus for that purpose. (*Communicated by Léon Jarosson and Albert Bastaert.*)	698	11th March 1867	William Clark.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
AIR SUPPLYING, &c.—*continued.*			
Machinery for obtaining and giving off motive-power, for the purpose of working the different kinds of machines in any mines, or for hauling, driving or drawing any kind of carriages in mines or other places.	848	23rd March 1867	Loxley Horsfield.
Improvements in machinery employed in getting coal and other minerals, and in tramways to be used therewith, also in engines to be worked by compressed air or other fluid.	886	26th March 1867	George Edmund Donisthorpe.
Improvements in the manufacture of iron and steel, and in furnaces and apparatus to be used in the said manufacture.	909	28th March 1867	Thomas Roper.
Improvements in decanting or drawing off wines, beer, spirits and other liquids, and in the apparatus employed therein. (*Communicated by Jean Gaudin.*)	921	29th March 1867	John Henry Johnson.
Blowing engines - - - -	1072	11th April 1867	Alexander Carnegie Kirk.
Arrangement of railway brakes - - -	1111	13th April 1867	Alfred Andrew Langley.
Manufacture of steel and soft iron from cast iron -	1122	16th April 1867	James Hargreaves.
Apparatus for catching fish - - -	1146	18th April 1867	William Wilkinson.
Construction of blowing and pumping engines - (*Communicated by Philander Higley Roots.*)	1181	23rd April 1867	Alfred Vincent Newton.
Improved means and apparatus for drying moist substances, or drying and burning granular substances, or evaporating liquid substances, and economizing the waste heat produced in the processes.	1195	25th April 1867	George Gordon.
A new or improved process of preserving meat, fish and other substances. (*Communicated by Francesco Cirio.*)	1200	25th April 1867	Clinton Edgcumbe Brooman.
Life boats - - - - - (*forming air chambers under the thwarts.*) (*Communicated by Albert Lintonner Shears and William Spencer Driggs.*)	1211	26th April 1867	Alexander Melville Clark.
Hoists suitable for raising and lowering weights -	1226	27th April 1867	Walter Crooke. Thomas Wrightson.
Construction of buckets for air and other pumps -	1235	29th April 1867	Jacob Bird.
Manufacture of alcohol and other spirits - -	1288	2nd May 1867	John Fletcher Collins.
Improvements in meters for measuring the flow of water and other fluids, which improvements are applicable also in the construction of pumps for air, water and other fluids. (*Communicated by Heinrich Wilhelm Schneider.*)	1303	3rd May 1867	Charles Bosch Reitz.
Machines for drying yarns, paper and fabrics -	1389	10th May 1867	James Johnson. Alfred Giles.
Apparatus for communicating between the passengers, guards and engine drivers of a railway train.	1471	17th May 1867	Josiah Latimer Clark.
Drying malt and also brewers' and distillers' grains and spent hops.	1485	18th May 1867	James Lee Norton.
Machinery for washing and drying wool and other materials.	1486	18th May 1867	James Lee Norton.
Rotatory engines and pumps - - - (*or exhauster.*)	1529	22nd May 1867	Ebenezer William Hughes. Thomas Howard Head.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
Air Supplying, &c.—*continued.*			
Improvements in gas blow pipes and in blow pipe torches or flames.	1530	23rd May 1867	Frederick Hardwick Johnson.
Means and apparatus employed for conveying telegraphic despatches, letters and other light articles through tubes. (*pneumatic tubes.*) (*Partly communicated by Dr. Werner Siemens.*)	1532	23rd May 1867	Charles William Siemens.
An improved mode of obtaining motive-power and the apparatus employed therein. (*procuring vacuum.*)	1594	29th May 1867	Thomas Edmund Passee.
Drying peat and other materials - - -	1595	29th May 1867	William Barry Ritchie. Jacob Geoghegan Willans.
Improvements in apparatus for applying adhesive agents to pieces of paper and other light materials, and for lifting the same, especially applicable to machinery for the manufacture of envelopes.	1623	31st May 1867	Phineas Lawrence.
Certain improvements in the manufacture of iron and steel, and in the means or apparatus for effecting the same.	1635	3rd June 1867	William Haden Richardson.
Inkstands - - - - -	1669	7th June 1867	Charles Emile Giojola. James Hopffe Gray. Philip Martinengo.
Apparatus to be used in signalling in and from railway trains.	1736	13th June 1867	Samuel Hancock.
An improved apparatus for utilizing the power spent in stopping or retarding the motion of carriages and other vehicles and machinery, as also the power produced by carriages and other vehicles when moving down inclines. (*compressing air.*) (*Communicated by Jules Péan.*)	1762	17th June 1867	Charles Denton Abel.
Machinery for compressing air - - -	1768	17th June 1867	Isaac Griffith Lloyd.
Rotary engines and pumps - - - (*or exhausters.*)	1791	19th June 1867	Ebenezer William Hughes. Thomas Howard Head.
Improvements in actuating motive-power engines and in the apparatus or means employed therefor.	1892	28th June 1867	Colin Brown.
An improved sucking and forcing hydropneumatic pump with no piston.	1898	29th June 1867	Paul Zaroubine.
A certain improved mode of manufacturing iron and steel. (*introducing air.*)	1905	29th June 1867	William Haden Richardson.
Appliances for filling into and drawing liquids from casks and other vessels, and for excluding the air from such vessels when empty.	1935	3rd July 1867	John McKibbin.
Manufacture of steel and soft iron from cast iron -	2046	12th July 1867	James Hargreaves.
Safety or relief valves - - - - (*for blast cylinders.*)	2053	12th July 1867	John Pasfield.
Preservation of meat and animal substances - (*excluding the air.*)	2079	15th July 1867	Theophilus Redwood.
Apparatus for drawing or raising beer and other malt or spirituous liquors to a higher level than that of the cask or other vessel in which they are kept. (*by compressed air.*)	2081	15th July 1867	James Fleming.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
Air Supplying, &c.—*continued.*			
Improved apparatus for pumping fluids - -	2334	14th Aug. 1867	William Bradshaw Leachman. John Hobroyd.
Heated air engines - - - -	2346	15th Aug. 1867	Francis Herbert Wenham.
Improvements in the manufacture of iron and steel, and in apparatus employed in the said manufacture. (*Communicated by Virgil Warren Blanchard.*)	2420	23rd Aug. 1867	William Robert Lake.
A mode of increasing the efficiency of steam for motive-power purposes. (*Communicated by John Blake Tarr.*)	2600	14th Sept. 1867	William Edward Newton.
Improvements in apparatus for testing telegraph conductors, part of the invention being applicable to other purposes. (*mercurial air pump.*)	2622	18th Sept. 1867	Frederick Henry Varley.
Improvements in the construction of air cylinders of blast engines, and in the valve arrangements of the same. (*Communicated by Franz Stichler.*)	2682	23rd Sept. 1867	Louis Rudolph Bodmer.
Improvements in the manufacture of rails, bars, and other articles of iron, and in the apparatus employed therefor - - - (*saturating with gas.*)	2839	9th Oct. 1867	John James. Thomas Jones.
Means or machinery for working or actuating the slide valves of steam pumps and blowing engines - - - - -	2854	11th Oct. 1867	John Withinshaw. John Edward Baker.
Improvements in telegraphic communication by pneumatic means, and in the apparatus employed therein - - -	2900	16th Oct. 1867	Alexander Prince. Alexander Charles Montague Prince.
An improved process and composition for the preservation from decay of stone, brick, plaster, metal and other substances, and for hardening or glazing their surfaces so as to prevent smoke or dirt from adhering to them.	2919	17th Oct. 1867	James Cubitt.
Ozonized or oxygenated bread, biscuits, cakes and other substances. (*exhausting the air.*)	2976	23rd Oct. 1867	Thomas Welton.
Manufacture of pressed leather - - -	2977	23rd Oct. 1867	Frederick John Bugg.
Apparatus for compressing air and for working pneumatic railways.	2978	23rd Oct. 1867	Frederic Seiler.
Improved modes of and means for curing, drying, preserving and packing meat, fruit, vegetables and other perishable substances. (*compressing air, &c.*) (*Communicated by Daniel E. Somes.*)	3006	25th Oct. 1867	William Robert Lake.
An improved mode of and apparatus for exhausting or rarefying the air in vessels for food-preserving, distilling and other purposes. (*Communicated by James Gordon and John Archbald.*)	3069	31st Oct. 1867	William Robert Lake.
Improvements in apparatus for stirring or agitating solid substances, and for exposing them to the action of the air, gases and vapours.	3124	5th Nov. 1867	Arthur McDougall.
Improvements in the manufacture of wheat and other grain into flour, and in the machinery connected therewith.	3140	7th Nov. 1867	Thomas James Baker.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
AIR SUPPLYING, &c.—*continued.*			
Improvements in treating oils and spirits, and in apparatus to be used for this purpose.	3191	11th Nov. 1867	Francis Louis de Gerbeth.
Manufacture of grindstones and other blocks or forms of artificial stone - - - -	3193	11th Nov. 1867	Frederick Ransome. Henry Bessemer. Ernest Leslie Ransome.
Certain improvements in the manufacture of iron and steel, and in the means or apparatus for effecting the same. (*injecting air or gas.*)	3226	14th March 1867	William Haden Richardson.
Improvements in the process of and in apparatus employed in treating and separating minerals, earths and other substances, when ground or pulverized. (*subjecting to blast.*)	3248	16th Nov. 1867	Israel Swindells.
Merchants' ships and other vessels and appliances connected therewith.	3331	25th Nov. 1867	George Bell Galloway.
Means of and apparatus for treating metals and minerals in order to produce their oxides or other chemical or mechanical combinations, and to separate metals from their ores or from their alloys. (*Communicated by Zabdiel Adams Willard and William Gardner Adams.*)	3360	27th Nov. 1867	Henry Francis Gardner.
An improved method of manufacturing cast steel and malleable iron. (*Communicated by Edward Louis Seymour.*)	3537	12th Dec. 1867	Alfred Vincent Newton.
Improved appliances and means for conveying salt-water fish through fresh water and overland and on land. (*Communicated by Adolphe Smidth.*)	3548	13th Dec. 1867	Leopold Auguste Damm.
An improved apparatus to be employed in the manufacture of iron and steel.	3614	19th Dec. 1867	William Haden Richardson.
Direct acting double-action steam pumps - (*or for blowing and exhausting.*)	3630	21st Dec. 1867	William Walker. Edward Holt.
Improvements in tanning and in the apparatus to be employed therein.	3649	23rd Dec. 1867	Jonas Dawkins.
Improvements in the manufacture of iron and steel, and in furnaces and apparatus used in the said manufacture - - - -	3667	24th Dec. 1867	George James Hinde. Thomas Callender Hinde.
Improvements in motors or apparatus for generating motive-power, and in the method of applying the same to produce useful effect. (*compressing air or gas.*) (*Communicated by Benjamin Talbot Babbitt.*)	3690	28th Dec. 1867	William Edward Newton.
Improvements in the treatment of crude or cast iron, and in the manufacture of malleable iron and steel.	3714	31st Dec. 1867	Henry Bessemer.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
AIR SUPPLYING, &c.—*continued.*			
IV.—Ventilation; Supplying and Purifying Air for Buildings, Mines, Ships, Carriages, &c.			
An improved mode of and machinery or apparatus for obtaining power from the motion of a ship or vessel at sea, for pumping, ventilating and other purposes. (*Communicated by Wilhelmus Johannes Van de Ven.*)	11	2nd Jan. 1867	Charles Denton Abel.
An improved apparatus for working "punkahs," the same being also applicable for watering tatties.	34	5th Jan. 1867	George Logan.
Means of saving life in pits and mines - -	40	7th Jan. 1867	Charles James Pownall.
Waterproof and other articles of wearing-apparel -	66	10th Jan. 1867	Alfred Foucaut.
Means and apparatus for ventilating mines -	117	17th Jan. 1867	Robert James.
Certain improvements in the ventilation of mines -	235	29th Jan. 1867	John Hopkinson.
Horticultural buildings or glazed structures for horticultural and other purposes.	294	2nd Feb. 1867	William Richardson.
Certain improvements in apparatus for preventing "downdraught" in chimnies, which may also be applied for the purpose of ventilation.	444	19th Feb. 1867	Charles Wenner.
Means of ventilating pits and mines - - -	552	28th Feb. 1867	Charles James Pownall.
Destroying explosive gases in coal and other mines, in order to render them safe for the miners to enter - - - -	565	28th Feb. 1867	James Harbert. Frederick Goodman.
Improvements applicable to the ventilation of theatres, churches, and other large buildings, and in purifying and cooling the air supplied thereto. (*Communicated by Henri Cabanes.*)	722	13th March 1867	William Edward Newton.
An improved mode of and apparatus for warming and ventilating buildings.	791	19th March 1867	Matthew Semple.
Steam heating and ventilating apparatus - - (*Communicated by Adolph Sternfeld.*)	827	21st March 1867	George Haseltine.
Construction of floors and rooms for buildings -	885	26th March 1867	Richard Moreland.
Improvements in means or apparatus employed in the cure of smokey chimneys, and in ventilating buildings and other places - - -	941	30th March 1867	Richard Canham. William Kreut.
An improved process for manufacturing ice and for other refrigerating purposes. (*for ventilation.*) (*Communicated by Thaddeus Sobeski Carlincourt Lowe.*)	952	30th March 1867	William Edward Newton.
Machinery or apparatus for obtaining and applying motive-power. (*as a ventilator.*)	984	2nd April 1867	Jean Albert Moll.
Fittings for stables, harness-rooms and cow-houses (*ventilators.*)	993	3rd April 1867	James Musgrave.
A new improved apparatus applicable to the ventilation of mines, buildings and other places.	1194	25th April 1867	Theodore Lemielle.
Improvements in skylights and ventilators for steam vessels, part of which is applicable to other structures.	1349	7th May 1867	Norman Willis Wheeler.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
AIR SUPPLYING, &c.—*continued.*			
An improved self-acting and ventilating nose or feed bag for horses - - - - (*Partly communicated by Nathaniel Knight.*)	1395	11th May 1867	John Adams Knight. Charles Bastand.
An improved fire-escape, parts of which are applicable to the ventilation of buildings, and the extinguishing of fire therein - - -	1418	13th May 1867	Martin Dadd Rogers. Joseph Wilson.
Improvements in apparatus for securing cords and straps, such as are used for raising and lowering window blinds, ventilators, carriage windows and for other similar purposes - -	1696	8th June 1867	Robert Edward Pepys. James Warburton.
Improvements in the construction of life-boats, and in detaching tackle for boats. (*and ventilating.*) (*Communicated by Milton Vorse Nobles, David Decker and William James Dounce.*)	2052	12th July 1867	Alexander Melville Clark.
Manufacture of corsets - - - - (*and ventilating.*) (*Communicated by Joseph Beal, Granville Webster, Edward Sawyer and John Hunt.*)	2056	12th July 1867	George Tomlinson Bousfield.
Means or mode of ventilating the interior of railway and other carriages, cabins and holds of ships, and other enclosed spaces. (*Communicated by Signor Vecchj.*)	2078	15th July 1867	Alfred Buckingham Ibbotson.
Pipes for ventilating, heating and vaporizing hothouses, malthouses and other buildings and residences.	2125	20th July 1867	William Taylor.
Improved automatic apparatus for the ventilation of railway carriages, omnibuses and other vehicles, and the cabins of steamboats.	2126	20th July 1867	William Gaudly Creamer.
Ventilators - - - - -	2130	20th July 1867	James Hooper.
Means of ventilating and regulating the draught of close fire ranges or kitcheners.	2461	29th Aug. 1867	Joseph Douglas.
Apparatus for submarine exploration - - (*purifying the air.*) (*Communicated by George Wrightson.*)	2466	29th Aug. 1867	Alexander Melville Clark.
Improved apparatus for excluding dust from railway carriages.	2526	6th Sept. 1867	William Gaudly Creamer.
Apparatus for ventilating rooms and buildings -	2641	20th Sept. 1867	William Potts.
Ventilators for hats and other coverings for the head.	2655	21st Sept. 1867	Percy Crause.
Apparatus for ventilating underground railways and other like structures.	2684	23rd Sept. 1867	Sanders Bevan.
Apparatus or arrangements for warming and ventilating buildings.	2701	25th Sept. 1867	William Woodcock.
Apparatus for warming and ventilating apartments or buildings.	2853	11th Oct. 1867	Richard George.
Fans for the ventilation of mines, or for propelling air into furnaces, or for other purposes.	2964	22nd Oct. 1867	Theodore Lemielle.
Means for ventilating buildings and other places.	2968	22nd Oct. 1867	James White.
Improved modes of and means for curing, drying, preserving and packing meat, fruit, vegetables and other perishable substances. (*ventilating packing-houses.*) (*Communicated by Daniel E. Somes.*)	3006	25th Oct. 1867	William Robert Lake.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
AIR SUPPLYING, &c.—*continued.*			
Ventilation of buildings, ships and carriages - (*Communicated by Herrn Scharrath.*)	3060	30th Oct. 1867	Alfred Vincent Newton.
Warming, ventilating and heating apparatus -	3155	8th Nov. 1867	Joseph Wontner Smith. Tony Petitjean.
Improvements in omnibuses and similar vehicles, and in apparatus in connection therewith, part of which improvements are also applicable to railway and other carriages. (*ventilator.*)	3178	11th Nov. 1867	William Thompson.
Certain improvements in apparatus for ventilating buildings and other similar purposes.	3361	27th Nov. 1867	James Sutcliffe Smith.
Improvements in the means of ventilating rooms and buildings, and in apparatus for the same.	3397	29th Nov. 1867	John Joseph Parkes.
Improvements in steam winches, which are also applicable to other similar purposes. (*applicable to ventilators.*) (*Communicated by Joseph Corradi.*)	3425	2nd Dec. 1867	George Breen.
An improved ventilator - - - -	3626	21st Dec. 1867	John Thomas Kershaw.
Improvements in warming, ventilating and heating apartments or buildings, and in the arrangement of apparatus connected therewith.	3682	27th Dec. 1867	John William Lewis.
ALKALIES; ALKALINE AND EARTHY SALTS; SALTS OF ALUMINA; BARYTA, IODINE AND COMPOUNDS.			
A method of manufacturing a salt or salts of ammonia.	358	8th Feb. 1867	William Septimus Losh.
Manufacture of carbonate of soda and of potash -	494	22nd Feb. 1867	Charles Kessler.
Utilizing a certain description of clay and a substance usually found therewith. (*for making sulphate of alumina.*)	551	27th Feb. 1867	Alexander McDougall.
Improvements in and apparatus for the manufacture of chloride of lime.	728	13th March 1867	Benjamin Platt.
Improvements in obtaining useful products from certain materials produced in the process of galvanizing or coating iron with zinc. (*muriate of ammonia.*)	1107	13th April 1867	Charles Crockford.
Manufacture of paper and of the chemical matters employed therein - - - - (*caustic leys.*) (*Partly communicated by Ernest Pinchon.*)	1171	22nd April 1867	Charles Townsend Hook. Eustace Hook.
Improvements in the treatment of fibrous materials and in apparatus to be used in such treatment. (*recovering potash.*)	1207	26th April 1867	John Watson Burton.
Treatment and utilization of certain ferruginous salts and solutions. (*for obtaining muriate of ammonia.*)	1556	25th May 1867	Isham Baggs. Frederick Braby.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
ALKALIES, &c.—*continued.*			
An improved mode of and apparatus for producing cold. (*obtaining nearly anhydrous liquid ammonia.*)	1621	31st May 1867	Rees Reece.
Manufacture of hydrate and carbonates of soda - (*Communicated by Mr. Filipps Blan.*)	1655	5th June 1867	George White.
Utilizing certain materials or products obtained during the manufacture of steel and iron.	2114	19th July 1867	James Hargreaves.
Improvements in the production of compounds of soda from chloride of sodium, and compounds of potassa from chloride of potassium, and in apparatus employed therein.	2121	20th July 1867	James Hargreaves.
Treating phosphate of lime for the manufacture of manure and for other purposes.	2344	14th Aug. 1867	John Thomas Way.
Treating products obtained when operating on wood and other vegetable substances to obtain fibre therefrom. (*waste alkali.*)	2370	17th Aug. 1867	Frederick Burnett Houghton.
Treatment of seaweed for obtaining valuable products from it.	2436	26th Aug. 1867	Edward Sonstadt.
Manufacture of Epsom salts - - - - (*Communicated by Messrs. Vorster and Gruneberg.*)	2685	23rd Sept. 1867	Augustus Ziegele.
Obtaining chlorine, sodium, potassium, phosphorus and their compounds.	2801	5th Oct. 1867	James Anderson.
Improvements in treating sewage or other liquid matters so as to purify the more fluid portions thereof, and recover some of the contained matters for re-use in manufacturing processes, and in the preparation of others for use as manures - - - - - - - - (*obtaining chemical matters.*)	2894	15th Oct. 1867	Thomas Henry Baker. Thomas Woodroffe.
Manufacture of alumina and salts of alumina from blast furnace slag, or from other silicates of alumina containing an excess of lime or magnesia - - - - - -	2952	21st Oct. 1867	William Crossley. Thomas Charles Hutchinson.
Improvements in the process of and in apparatus employed in treating and separating minerals, earths and other substances when ground or pulverized.	3248	16th Nov. 1867	Israel Swindells.
Improvements in evaporating apparatus and in utilizing the steam derivable from such apparatus. (*concentrating black alkaline liquor, obtaining salts of soda.*)	3277	19th Nov. 1867	William Anderson.
Manufacture of soda and potash - - -	3295	21st Nov. 1867	Joseph Townsend.
Improvements in the preparation of sulphate of magnesia, applicable to the treatment of the crude potash salts of Strassfurt, and the refuse from the manufacture of chloride of potassium. (*Communicated by Julius Vorster and Hermann Gruneberg.*)	3389	29th Nov. 1867	Charles Albisser.
Manufacture of soda and potassa - - -	3559	14th Dec. 1867	James Hargreaves.
Improvements in the extraction of ammonia from fermented and other liquids, and in the regeneration of the agents used in such extraction. (*Communicated by Armand Coste and Louis Taupin De Rosnay.*)	3566	14th Dec. 1867	Alexander Melville Clark.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
ALKALIES, &c.—*continued.*			
Improvements in the manufacture of soda and other ærated waters, and in the manufacture of ærated bread. (*residue for making Epsom salts.*)	3573	16th Dec. 1867	William Huskisson the younger.
Manufacture of bicarbonate of potash and soda -	3581	16th Dec. 1867	William Huskisson the younger.
ANCHORS, LOWERING ANCHORS.			
An improvement in ships' anchors - -	157	22nd Jan. 1867	Thomas Murray Gladstone.
Anchors - - - - - -	197	25th Jan. 1867	John Coope Haddan.
Improvements in the tackle for and in the manner of letting down and weighing anchors on shipboard.	723	13th March 1867	Frederick Robert Augustus Glover.
Improvements in apparatus to be used for towing ships or vessels, and in apparatus for laying submarine telegraph cables. (*or anchoring ships.*)	1015	4th April 1867	James Maze Kilner.
Apparatus for raising or moving heavy weights - (*raising anchors.*)	1436	15th May 1867	William Clarke. Edmund Walker.
Anchors suitable for steam ploughs and implements.	1829	22nd June 1867	Joseph Surridge.
A projectile anchor and block for launching of the life-boat and other boats in rough weather, and for ships' use in cases of loss of anchorage.	2534	7th Sept. 1867	John Banting Rogers.
An improved mode of preparing iron for the manufacture of various articles where great strength and capability of resistance to tensile strain or torsion is required. (*for anchors.*) (*Communicated by Michel Pawlowitch Lwoff.*)	2865	11th Oct. 1867	William Edward Newton.
Anchors - - - - -	3112	5th Nov. 1867	Thomas Wingate, junior.
Improvements applicable to the rigging, chains, windlasses, anchors and other parts of ships or vessels, or to collieries, railways, rolling stock, or other purposes, to prevent sudden blows, jerks or strains.	3637	21st Dec. 1867	James Davison.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
AXLES, SHAFTS, BEARINGS, JOURNALS, AXLE-BOXES, PACKINGS FOR AXLES; LUBRICATING AXLES, &c.			
An improved apparatus for lubricating carriage axles. (*Communicated by John Burt Powell.*)	96	14th Jan. 1867	George Haseltine.
An improved method of casting articles in iron and steel. (*axles.*) (*Communicated by Nicolas Pooteeloff.*)	244	29th Jan. 1867	William Edward Newton.
An improved machine for cutting screws - - (*bearings.*) (*Communicated by Henry Bascom Brown.*)	269	31st Jan. 1867	Edward Thomas Hughes.
Forming shafts, rollers, drums and wheels with india-rubber surfaces. (*bearing wheels.*)	289	2nd Feb. 1867	John Poole.
Machinery and apparatus for supporting, moving and forging heavy masses of metal. (*axles.*)	342	7th Feb. 1867	John Ramsbottom.
Manufacture of iron and steel - - - (*ingots for railway axles.*)	546	27th Feb. 1867	Alexander Lyman Holley.
Axles, shafts and axle-boxes - - -	582	1st March 1867	James George Stidder. Robert Morris.
An improved self-lubricating axle for carriages and other vehicles. (*Communicated by Silas Safford Putnam.*)	593	2nd March 1867	George Haseltine.
Manufacture of packing for the joints of steam-engines, pumps and for other purposes. (*for journal boxes.*) (*Communicated by Morris Botticher.*)	613	5th March 1867	George Haseltine.
Bearings for railway axles - - - (*Communicated by Claes Adelskold.*)	672	9th March 1867	Lorentz Tidén.
Improvements in rotary digging machines and in teeth for the same. (*axles and bearings.*) (*Communicated by George Granville Lobdell.*)	859	25th March 1867	George Davies.
An improved means of economizing motive-power - (*friction rolls for bearings.*) (*Communicated by Antoine Courme.*)	973	2nd April 1867	Henri Adrien Bonneville.
An improved system of tank locomotive engine -	977	2nd April 1867	Jean Jacques Meyer. Adolphe Meyer, junr.
An improved lubricator for oiling axles and other moving pieces of machineries.	1035	6th April 1867	Jules de la Coux des Roseaux.
Axles for carriages - - - - (*Communicated by Frederick William Richter.*)	1156	20th April 1867	Samuel Cocker.
Certain improvements in lubricators to be used for the bottom ends of vertical spindles or shafts.	1224	27th April 1867	Joseph Wilson Lowther.
An improved packing for stuffing-boxes - - (*Communicated by Ivon Bruce Miller.*)	1234	29th April 1867	George Davies.
Improvements in rails for tramways and in the axles of the carriages intended to run thereon.	1244	30th April 1867	George Severn.
Lubricators for the supply of mineral and other oils to bearings and journals of shafts, pit tubs, and other parts requiring lubrication.	1261	1st May 1867	Ferdinand Jossa.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
AXLES, &c.—*continued.*			
Certain improvements in the construction of the boxes or bearings of the axles of railway carriages and other rolling stock.	1304	4th May 1867	Herbert Allman.
Manufacture of steel tyres, rails, axles, bridge links, shafting, and other articles where uniformity in the wearing surfaces and increased durability is required.	1327	6th May 1867	George Wilson.
Certain new and useful improvements in machinery for making roving and for spinning such into yarn. (*spindle step caps.*)	1340	7th May 1867	Albert Huston Gilman.
Springs for buffers and bearings and for other purposes.	1369	9th May 1867	Thomas Aldridge Weston.
Axles for carriages - - - - -	1404	11th May 1867	John Watkins.
Axle-boxes and bearings - - - (*Communicated by Patrick Sarsfield Devlan.*)	1429	14th May 1867	Alfred Vincent Newton.
Treating iron to obtain metallic compounds for various uses. (*for bearings.*)	1461	17th May 1867	Andrew Linniere Dowie.
Boring metals in the solid - - - (*shafting.*)	1550	24th May 1867	Thomas Greenwood.
Improvements in axles and boxes, and in securing wheels thereto.	1727	12th June 1867	Joseph Halford Snelson.
Axles - - - - - -	1859	26th June 1867	Robert Eadie.
Lubricators for lubricating rotating shafts and other moving surfaces.	1928	2nd July 1867	Adolph Schwartz.
Construction of bearings for machinery, agricultural implements and carriages.	2037	11th July 1867	Benjamin Hunt.
Improvements in the manufacture of clips or spring boxes for railway and other carriages, and in machinery or apparatus to be employed therein.	2061	13th July 1867	Jacob Walker.
Forming shafts, rollers, drums and wheels with india-rubber surfaces.	2232	2nd Aug. 1867	John Poole.
Improvements applicable to axles of engines and carriages for railways and other roads - -	2341	14th Aug. 1867	George Buxton. Samuel Bann.
Construction of locomotive traction engines - (*mounting the axle.*)	2456	28th Aug. 1867	Robert Edwards.
Means of securing wheels, pulleys, cranks, and other articles on their shafts or axles.	2515	5th Sept. 1867	John Ford.
Lubricating shafts and other frictional surfaces -	2525	6th Sept. 1867	Thomas Hodson. William Mather. James Risley.
Improvements in the bearings of "hydro-extractors," and in the method of supplying lubricating matter to the same, applicable also to the lubricating of the bearings of other machinery - - - - -	2569	11th Sept. 1867	Edward Kenworthy Dutton. Sam Mason, junr.
Improvements in means or apparatus to be employed to sewing-machines, and to other machines wherein cams or cam surfaces are employed working in connection with trucks or rollers, by means of which they are in working rendered comparatively noiseless. (*coating the roller axis.*)	2610	16th Sept. 1867	William John Cunningham.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
AXLES, &c.—*continued.*			
Manufacture of cranked axles, cranked shafts and other heavy forgings - - -	2693	25th Sept. 1867	Robert Wilson. John Nuttall.
An improved lubricating packing - -	2746	28th Sept. 1867	Thomas Silver.
Railway and other carriages and various parts of the same. (*axle-boxes and blocks.*)	2796	4th Oct. 1867	Joseph Offord.
Arrangement and construction of street sweeping and cleaning machines. (*constructing the axles.*)	2845	9th Oct. 1867	William Warren.
An improved mode of preparing iron for the manufacture of various articles where great strength and capability of resistance to tensile strain or torsion is required. (*for axletrees, engine shafts, &c.*) (*Communicated by Michel Pawlowitch Lwoff.*)	2865	11th Oct. 1867	William Edward Newton.
Centrifugal machines for separating liquid from solid matter. (*bearing.*) (*Communicated by David M^c^Colley Weston.*)	3041	28th Oct. 1867	William Robert Lake.
Axles for carriages - - -	3071	31st Oct. 1867	John Watkins.
An improvement in roller or anti-friction journal boxes or bearings, applicable also to the hubs of wheels. (*Communicated by Edward Wadhams.*)	3123	5th Nov. 1867	Alfred Vincent Newton.
Shaft couplings - - - - (*Communicated by Ebenezer Edwin Gilbert.*)	3159	8th Nov. 1867	William Inglis.
New and useful improvements in lubricating boxes (*Communicated by Isaac Pennington Wendell.*)	3195	12th Nov. 1867	Henri Adrien Bonneville.
Certain new and useful improvements in the running mechanism of car and carriage trucks of any nature.	3363	27th Nov. 1867	Samuel Augustus Chase.
Improvements in machinery or apparatus for grinding bones, ores and other substances, a part of which improvements is applicable to footstep bearings generally. (*Communicated by Edwin Pugh Baugh.*)	3393	29th Nov. 1867	John Henry Johnson.
Steps of spindles for spinning, roving, slubbing, doubling and twisting frames - - -	3432	3rd Dec. 1867	James Collingham. Thomas Ellison Smith.
An improved mode of reducing the friction of revolving and sliding surfaces. (*shafts.*)	3628	21st Dec. 1867	Edward Lord.
Construction and arrangement of plummer blocks and bearings for propeller shafts and other analogous purposes - - - -	3654	24th Dec. 1867	William Burley. William Henry Glasson.
Machinery or apparatus for spinning cotton and other fibrous materials. (*lubricating journals.*) (*Communicated by James Eaton.*)	3719	31st Dec. 1867	John Henry Johnson.

(*For Bearing Springs, see* "SPRINGS.")

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
BAGS, BASKETS, SACKS, HOLDERS AND FASTENINGS.			
Tobacco pouches - - - - -	65	10th Jan. 1867	George Inderwick.
Improvements in the manufacture of boots and shoes, and in machinery or apparatus therefor, which improvements are also equally applicable to the manufacture of "portemonnaies," travelling bags, parts of harness, and in fact to almost all such manufactures as require fixing, basting, cementing, sewing or stitching. (*Communicated by Jules Constant Touzet.*)	206	26th Jan. 1867	Bristow Hunt.
Treating vegetable substances chiefly applicable to the manufacture of paper pulp and fibres. (*for making baskets.*) (*Communicated by Benjamin Chew Tilghman.*)	385	11th Feb. 1867	William Edward Newton.
Travelling bags - - - - -	1041	6th April 1867	John Drew. Edward Southwell. Henry White.
A new or improved machine or apparatus for filling sacks with grain, flour, bran, sugar and other granular or pulverous substances. (*Communicated by Auguste Hourdain.*)	1492	20th May 1867	Charles Denton Abel.
Improvements in the manufacture of tobacco and other pouches, part of such improvements being applicable to the frames of other bags or receptacles.	1554	25th May 1867	Allen Oldroyd.
Improvements in machinery or apparatus for separating liquids or moisture from substances, and also for revivifying and cooling animal charcoal and other substances, and for treating sugar. (*baskets with open bottoms.*)	1707	10th June 1867	William Orr.
Cartridge pouches or carriers - - - (*Communicated by Clarence Blake.*)	2098	17th July 1867	George Henry Daw.
A new or improved elastic clasp or lock suitable for pocket-books, purses, wallets or any kind of leather cases.	2197	30th July 1867	Abel Holloway.
Machinery for the manufacture of paper bags -	2283	7th Aug. 1867	Joseph Pickles Binns.
An improved fastening for paper bags and paper parcels. (*Communicated by Charles Edwin Atwood and George Warren Davis.*)	2429	24th Aug. 1867	William Edward Newton.
Improvements in articles consisting of muffs combined with bags or similar receptacles, and in the frames of such receptacles - - -	2892	15th Oct. 1867	Moritz Vogl. Heiman Van Dyk.
Dressing and other bags - - - -	3007	25th Oct. 1867	Thomas Stennett.
A new and improved machine for manufacturing paper bags. (*Communicated by Joseph Auguste Puginier.*)	3030	28th Oct. 1867	Henri Adrien Bonneville.
Mats and matting - - - - (*and nose bags.*)	3092	2nd Nov. 1867	William Cooke. Walter Francis.
Tobacco pouches, purses, cigar cases and bags of various kinds.	3197	12th Nov. 1867	Raoul Paul Faucheux.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
BAGS, &C.—*continued.*			
A new or improved butter basket - - -	3269	18th Nov. 1867	John Colebrook.
Tobacco pouches - - - - -	3341	26th Nov. 1867	Edwin Townshend.
Bags for coffee and other such like pots - -	3462	5th Dec. 1867	John Mabson.
Construction of bags, portmanteaus and other similar articles.	3638	21st Dec. 1867	Ignac Pick.
BATHS AND BASINS, BATHING APPLIANCES.			
Improvements in apparatus for heating water and delivering water to steam-boilers, which improvements are also applicable to other purposes. (*supplying baths.*)	27	4th Jan. 1867	Josiah Lane.
Construction of seats or chairs suitable for preserving life in case of shipwreck, and also for being used as bathing chairs.	78	11th Jan. 1867	Michael Hodge Simpson.
Improvements in the construction of wash basins, and apparatus for supplying hot and cold water to the same, which improvements are also applicable to apparatus for supplying water to baths and other similar receptacles.	147	21st Jan. 1867	Robert Harlow.
Improved bath belts to be applied in the bathing vessels.	699	11th March 1867	Marie Josephine Elisabeth Jullienne.
A travelling trunk, bath and cradle combined -	773	18th March 1867	William Henry Bailey.
Bathing apparatus applicable principally for horses (*Communicated by the Chevalier Achille Angelini.*)	985	2nd April 1867	William Clark.
Construction of marine baths - - -	1450	16th May 1867	George Fellows Harrington.
An improved combination of wood and textile substance for the construction of boats, baths and other vessels to be folded up for carriage.	1627	1st June 1867	Wilmot Bradford.
Manufacture of coal vases, buckets, casks, kegs, bins, baths, sugar funnels and other similar articles of hollow ware.	1786	19th June 1867	David Jones.
Construction of washing-basins and other utensils for holding liquids.	2072	15th July 1867	Isham Baggs.
A medical electric bath for men and animals, on the filtering principle by triple current, which is connected with the earth. (*Communicated by Jean Baptiste Marie Potin.*)	2835	9th Oct. 1867	Adolphe Danilecki.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
BAYONETS AND SABRES.			
Breech-loading fire-arms and bayonets for the same.	863	25th March 1867	Andrew Wyley.
Fastenings for securing bayonets on fire-arms - (*Communicated by Paul Ambrose Oliver.*)	2335	14th Aug. 1867	Alexander Melville Clark.
Breech-loading fire-arms - - - -	2846	10th Oct. 1867	Cyrus Avery.
BEE-HIVES.			
Construction of bee-hives - - - - (*Partly communicated by Pfarrer Dzierzon.*)	1775	17th June 1867	Sir Thomas Tancred, Baronet.
BELLS; RINGING BELLS.			
Improvements in call bells, letter balances and weighing machines, which are applicable to one or more of the afore-mentioned articles separately or combined - - - -	584	2nd March 1867	Robert Wilson. William Henry Bailey.
Improvements in the manufacture of steel bells and in mounting the same - - -	940	29th March 1867	Benjamin Farmer. Thomas Blamforth.
An improved method of and apparatus for signalling and giving alarm on railways.	1032	6th April 1867	Joseph Woods.
An improved alarm apparatus for indicating and registering the rise of water in the holds of ships or vessels. (*Communicated by Charles Benjamin Norton.*)	1239	29th April 1867	Marc Antoine François Mennons.
Treating iron to obtain metallic compounds for various uses. (*for bells.*)	1461	17th May 1867	Andrew Linmere Dowie.
Electric telegraphs - - - - (*for ringing bells.*)	1755	15th June 1867	Cornelius Varley. Samuel Alfred Varley.
Apparatus to be used for boiling eggs and for like purposes. (*and ringing a bell.*)	2750	30th Sept. 1867	Ira Dimock.
Improvements in the manufacture of circular webbing or gasket, applicable as packing for steam-engines, as covering for telegraph cables and other useful purposes, and in the machinery employed therein. (*bell ropes.*)	3046	29th Oct. 1867	Joseph Threlfall Carter.
Improvements in means of communication applied to railway carriages, and in apparatus for making signals, which improvements are in part applicable to other purposes. (*ringing bells.*)	3284	20th Nov. 1867	Hugh Hughes Lloyd.
An improvement in the manufacture of bells -	3416	2nd Dec. 1867	Charles Hargrove. Samuel Hargrove, junior.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
BELTS, BRACES, GIRTHS AND BANDS.			
Ladies' belts - - - - -	167	23rd Jan. 1867	John Martin Stanley.
An improved machine for pulling flax and other similar crops. (*construction of the belts.*) (*Communicated by Samuel Whitford Tyler.*)	228	28th Jan. 1867	George Haseltine.
Manufacture of stays, corsets and riding belts, and other similar articles.	408	13th Feb. 1867	Samuel Osborne.
Fastenings for driving and other belts or bands - (*Communicated by John Ashton Greene.*)	530	26th Feb. 1867	Alfred Vincent Newton.
Improved bath belts to be applied in the bathing vessels.	699	11th March 1867	Marie Josephine Elisabeth Jullienne.
Buckles or similar fastenings for braces, belts, straps or bands.	1074	11th April 1867	Richard Couchman.
Flexible galvanic batteries applicable to medico-electric purposes. (*belts and bandages.*)	1750	15th June 1867	Richard Beard.
An improved apparatus for winding bands or tapes - - - - - -	1872	27th June 1867	John Cash. Joseph Cash.
An improved fastening for neckties, scarfs, belts and other articles. (*Communicated by Simon Hayem, ainé.*)	2933	18th Oct. 1867	Samuel Solomon Maurice.
Drawer suspenders and brace fastenings - -	3074	31st Oct. 1867	Frederick Tew.
Manufacture of looped fabric for braces - -	3114	5th Nov. 1867	Samuel Hall Foster. Thomas Bunney.
Stays, corsets, bodices and riding belts - -	3118	5th Nov. 1867	Edward Charles Vine.
Braces for supporting articles of dress - -	3446	4th Dec. 1867	Joseph Sanders.
Improvements in collars, cuffs, anklets, belts and other like articles of wearing-apparel - -	3486	7th Dec. 1867	John Blakey. Howard Busby Fox.
Apparatus for saving life from drowning - -	3556	14th Dec. 1867	Archibald McMurdo.
BLEACHING AND DECOLOURISING.			
An improved process for hardening, bleaching and sweetening crude paraffin.	152	21st Jan. 1867	John Rowley.
Boiling and bleaching all kinds of textile fabrics and vegetable fibres and matters.	548	27th Feb. 1867	Murdoch Mackay.
Mode of regulating the speed of drying cylinders or rollers employed by dyers, scourers and bleachers.	674	9th March 1867	Auguste Rupp.
Improvements in and apparatus for the manufacture of chloride of lime.	728	13th March 1867	Benjamin Platt.
Machinery for seeding, breaking, drying, washing, bleaching, softening, combing, brushing and hackling flax, hemp, jute, China grass, New Zealand flax, Esparto and other fibres, for spinning and paper stuff.	841	22nd March 1867	John Spencer.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
BLEACHING, &C.—*continued.*			
Bleaching textile materials or fibres, more especially wood pulp, for the manufacture of paper and pasteboard. (*Communicated by Jean Bernard Biron.*)	1403	11th May 1867	William Clark.
Machines for washing and bleaching clothes and all kinds of textile materials. (*Communicated by Jules Decoudun.*)	1582	28th May 1867	Alexander Melville Clark.
An improved mixture or composition for bleaching vegetable fibres.	1712	11th June 1867	James Graham.
Improvements in the construction of elastic rollers for squeezing yarns and fabrics and for other purposes - - - - (*used in bleaching.*)	2174	27th July 1867	John Smith. William Schofield.
Machinery or apparatus for bowking, bleaching and cleansing textile fabrics and fibrous materials.	2243	3rd Aug. 1867	John Smith.
A new or improved process of bleaching vegetable fibre.	2623	18th Sept. 1867	William Wharton Burdon.
Improvements in preparing cloth and yarn to be dyed Turkey red, part of which improvements are applicable to bleaching yarn.	3419	2nd Dec. 1867	William Schofield.
BOBBINS AND COP-TUBES.			
Bobbins for spinning machinery - - - (*Communicated by Metallic Bobbin Company, Incorporated.*)	336	6th Feb. 1867	William Edward Newton.
Cops or bobbins and parts connected therewith, used in preparing and spinning fibrous substances - - - - - -	589	2nd March 1867	Alfred Illingworth. Henry Illingworth.
Bobbins - - - - - (*Communicated by Frederick Wolcott Northrop and Ezra Silliman Munson.*)	1236	29th April 1867	Edward Thomas Hughes.
Ribbon looms - - - - - (*shape of bobbins.*) (*Communicated by Antony Barrallon.*)	1274	2nd May 1867	Henri Adrien Bonneville.
Improvements in spools, reels or bobbins, and in the method of manufacturing the same.	2390	21st Aug. 1867	William Bostock.
An improved arrangement of machinery for making cops.	3227	14th Nov. 1867	James Combe.
Improvements in shuttles employed in weaving, and in bobbins used therewith - - -	3557	14th Dec. 1867	John Sharples. James Schofield.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
BONES, IVORY, HORN, PEARL AND SUBSTITUTES; ARTIFICIAL PEARLS AND BEADS.			
A new method of manufacturing and applying artificial pearls or beads. (*Communicated by Emmanuel Meyer.*)	331	6th Feb. 1867	Clinton Edgcumbe Brooman.
Apparatus for boiling fats, oils and bones, whereby to neutralize and avoid the escape of noxious gases.	515	25th Feb. 1867	William Barratt.
Preparation of buffalo horn as a substitute for whalebone.	1159	20th April 1867	John Boyles Roby.
A new or improved machine for crushing bones and other materials - - - - -	2010	9th July 1867	Edwin Crook. Frederick Crook.
An improved machine intended to divide, break or crush all substances capable of being triturated, more especially bones and horny substances of every kind, for converting them into manure. (*Communicated by Eugène Anduze.*)	2441	27th Aug. 1867	William Edward Gedge.
Improved modes of and means for curing, drying, preserving and packing meat, fruit, vegetables and other perishable substances. (*preparing hoofs, horns, &c.*) (*Communicated by Daniel E. Somes.*)	3006	25th Oct. 1867	William Robert Lake.
Improvements in machinery or apparatus for grinding bones, ores and other substances, a part of which improvements is applicable to footstep bearings generally. (*Communicated by Edwin Pugh Baugh.*)	3393	29th Nov. 1867	John Henry Johnson.
Treatment of gutta-percha, india-rubber, Honduras gum, and the other allied gums, for the production of a preparation or preparations applicable as a varnish, cement, paint, stain, water and air-proof material, solid or elastic material and for other purposes. (*substitute for ivory, bone, horn, &c.*) (*Communicated by Daniel Reed.*)	3542	13th Dec. 1867	Edward Reed Sintzenich.
Joining horn and whalebone - - -	3619	19th Dec. 1867	Charles Beck.
BOOKS, ALBUMS, PORTFOLIOS, BOOK COVERS, BOOK SLIDES OR HOLDERS; BOOK-BINDING.			
A new or improved compound material or substance to be used for binding books, for panelling, and for other purposes where strength and lightness are required.	90	14th Jan. 1867	Frederick Brampton.
Improvements in and connected with the folding of newspapers and other periodical publications.	110	16th Jan. 1867	William Alexander Lyttle.
Stands, holders or tables specially adapted for portfolios, prints, large books and such like articles.	194	25th Jan. 1867	Frederick Holt McLauchlan.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
Books, &c.—*continued.*			
Improvements in fastenings applicable to boots and shoes, gaiters, gloves, books, portemonnaies and other articles.	256	30th Jan. 1867	Saxon Macarthy.
Manufacture of envelope cases, blotting books and other articles, commonly called "writing" or "library sets," and other similar articles. (*book slides, book boxes, albums.*)	305	4th Feb. 1867	George William Betjemann.
An improved preparation of materials and the application thereof to letters, envelopes, parcels, packages, deeds and other valuable papers or commodities, for their better security, by exposing any attempt at tampering therewith.	491	22nd Feb. 1867	Charles Maitland Tate.
Portemonnaies, portfolios, pocket-books, cigar-cases and other similar articles.	510	25th Feb. 1867	Gustav Lüttringhaus.
Ironing, pressing, finishing and damping machinery. (*for bookbinders.*)	793	19th March 1867	James Moore Clements.
Manufacture of parcel books, account books, and other books requiring great strength - -	1296	3rd May 1867	George Francis Millin. Edwin John Potter.
Binders for papers and the like, which allow the whole or parts of the contents to be removed or exchanged.	1313	4th May 1867	Noah Mendal Shafer.
An improved book-rest - - - -	1482	18th May 1867	Edwin Owen Hallett. William Tamsett Hallett.
Machinery for folding sheets of paper or other fabric or material. (*applied to newspapers, book-binding, &c.*)	1502	21st May 1867	Joseph Davies.
Arming presses for producing devices on the covers of books and other articles.	1504	21st May 1867	John Gough.
Machinery for folding paper - - - (*in book making, folding newspapers, &c.*)	1536	23rd May 1867	Simon Atkinson. Thomas Atkinson.
Photographic albums and other like articles - (*Communicated by Frederic Wilhelm Marx.*)	1603	30th May 1867	Clinton Edgcumbe Brooman.
Improvements in apparatus for supporting or holding music and other books, and for turning over the leaves of the same.	1619	31st May 1867	Thomas Porter.
Paper-folding machines - - - -	1662	6th June 1867	James Livesey.
Ornamenting surfaces of paper, woven fabric and other material, to render them suitable for bookbinding and other similar uses.	1695	8th June 1867	Alexander Parkes.
A diary blotting pad - - - -	1832	24th June 1867	John Henry Kearns.
A new or improved elastic clasp or lock suitable for pocket-books, purses, wallets or any kind of leather cases.	2197	30th July 1867	Abel Holloway.
A new or improved material to be used as a substitute for oiled silk, bladders, gut-skins, india-rubber, and other waterproof materials and leather. (*binding for books.*)	2604	14th Sept. 1867	John Jeyes.
Utilizing refuse animal matters and producing skins and sheets therefrom. (*for book-binding.*)	2822	7th Oct. 1867	John Harcourt Brown.
An improved fastening for neckties, scarfs, belts and other articles. (*pocket-books.*) (*Communicated by Simon Hayem, aîné.*)	2933	18th Oct. 1867	Samuel Solomon Maurice.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
Books, &c.—*continued.*			
Binding or covering books and other similar articles. (*Communicated by Jules Alfred Hubert.*)	3020	26th Oct. 1867	Joseph John Perry.
Counter-check books - - - - -	3096	4th Nov. 1867	James Fraser. George Duncan.
Improvements in the method of sewing sheets of paper, forming books and pamphlets, and in machinery for effecting the same - -	3306	22nd Nov. 1867	Robert Leighton. Thomas Kirkham.
Boots, Shoes, Leggings, Skates; Cleaning Boots.			
Waterproof and other articles of wearing-apparel -	66	10th Jan. 1867	Alfred Foucaut.
Lasts for boots and shoes - - - - -	149	21st Jan. 1867	George Miles Wells.
Improvements in the manufacture of boots and shoes, and in machinery or apparatus therefor, which improvements are also equally applicable to the manufacture of "portemonnaies," travelling bags, parts of harness, and in fact to almost all such manufactures as require fixing, basting, cementing, sewing, or stitching. (*Communicated by Jules Constant Touzet.*)	206	26th Jan. 1867	Bristow Hunt.
Improvements in fastenings applicable to boots and shoes, gaiters, gloves, books, portemonnaies and other articles.	256	30th Jan. 1867	Saxon Macarthy.
An improved machine for manufacturing eyelets - (*for boots.*)	260	30th Jan. 1867	William Rodolphus Landfear.
Improvements in the manufacture of boot and shoe toe-pieces, and in the machinery or apparatus to be employed therein.	416	14th Feb. 1867	David Tenniswood.
Machinery for the manufacture of boots, shoes and other coverings for the feet - - -	418	14th Feb. 1867	Thomas Greenwood. John Keats.
Cricket spikes to be made in steel, iron, brass or any other metal or material. (*for boots.*)	490	22nd Feb. 1867	Joseph Wareing.
Lasts for making boots and shoes - - -	526	26th Feb. 1867	Joseph Lewis Sharman.
Improvements in machinery or apparatus for cleaning boots and shoes, also applicable to the cleaning of other articles - - -	655	8th March 1867	Henry Churchman. Frederick Braby.
A new or improved spring shank applicable to boots and shoes, and in the machinery employed therein - - - - - -	782	18th March 1867	Alvin Wales Moore. Elias McNeal.
Skates - - - - - -	931	29th March 1867	William Buxton Hilliard.
Manufacture of boot elastic web and other fabrics - (*see* "Weaving.")	939	29th March 1867	William Gadd. Louis Baillon.
Sewing-machines - - - - - (*for boot work.*)	1057	9th April 1867	William Newton Wilson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
Boots, &c.—*continued.*			
An improved manufacture of boots and shoes -	1240	29th April 1867	Edward Waterman.
An improvement in the manufacture of boots and shoes, and other articles of leather or kindred substances. (*Communicated by Thomas Briggs Smith.*)	1256	1st May 1867	William Snell.
Boots and shoes - - - - - - (*Communicated by George Franklin Chase.*)	1265	1st May 1867	John Henry Johnson.
Boots and shoes - - - - - - (*Communicated by Albert Van Wagenen.*)	1266	1st May 1867	John Henry Johnson.
An improved apparatus for cleaning or brushing boots and shoes.	1483	18th May 1867	George Haynes.
Apparatus to be employed in the manufacture of boots and shoes.	1545	24th May 1867	George Miles Wells.
Boots and shoes - - - - - - (*Communicated by Edward Heaton.*)	2035	11th July 1867	John Henry Johnson.
Heel tips and toe tips for boots and shoes - -	2064	13th July 1867	Henry Bell.
A new or improved fastening particularly applicable for leggings and gaiters - - -	2357	16th Aug. 1867	Hyman Frankenurg. Samuel Phillips.
An improved rotary heel for boots and shoes -	2375	19th Aug. 1867	John Cronier.
Springs for boots and shoes - - -	2457	29th Aug. 1867	John Macintosh. William Boggett.
A new or improved material to be used as a substitute for oiled silk, bladders, gut-skins, india-rubber, and other waterproof materials and leather. (*for gaiters.*)	2604	14th Sept. 1867	John Jeyes.
Method of and materials for manufacturing ammunition boxes, pontoons, baggage and other waggons and carriages, and various equipments for military, naval and civil purposes. (*leggings.*)	2630	19th Sept. 1867	Thomas Charles Clarkson.
Boots and shoes - - - - - - (*Communicated by Louis Auguste Favre.*)	2683	23rd Sept. 1867	Alexander Melville Clark.
Preparation of soles and heels for boots and shoes -	2735	28th Sept. 1867	Charles Mole.
Machinery for sewing boots and shoes - - (*Communicated by Augustus Destouy and Frederic Renaud.*)	2779	2nd Oct. 1867	William Robert Lake.
Rivetting the soles of boots and shoes - -	2805	5th Oct. 1867	William Low. John Treadwell.
A new or improved mode of securing or uniting stay, corset or legging busks - - -	2827	8th Oct. 1867	John Reading. Samuel Alfred Reading. George Edward Reading. FrederickFrancisReading.
Apparatus to be employed in the manufacture of boots and shoes.	2917	17th Oct. 1867	George Miles Wells.
An entwining gaiter or spiral legging - -	2921	18th Oct. 1867	John Hale.
Apparatus for cleaning and polishing boots, shoes, knives, forks, plate and other articles.	2935	18th Oct. 1867	James John Holden.
An improved artificial compound chiefly designed for use as a substitute for india-rubber or caoutchouc. (*for boots and shoes.*) (*Communicated by Austin Goodyear Day.*)	3108	4th Nov. 1867	William Robert Lake.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
Boots, &c.—*continued.*			
Improvements in the manufacture of elastic fabrics, part of which invention is especially applicable to the production of shaped slipper fronts and similar articles.	3173	9th Nov. 1867	Caleb Bedells.
Manufacture of soles and heels for boots and shoes	3281	20th Nov. 1867	Charles Mole.
Improved machinery for folding and pressing the edges of elastics used in boots and shoes. (*Communicated by Antoine Guérin.*)	3375	28th Nov. 1867	Edward Thomas Hughes.
Certain improvements in the manufacture of water-proof or liquid proof paper or glazed paper or fabrics. (*for lining boots.*)	3437	3rd Dec. 1867	John Thorpe.
An improved elastic material to be used as springs in boots and shoes, and in various other ways to which the same may be applicable.	3445	4th Dec. 1867	Christopher Paley.
Skates - - - - - -	3564	14th Dec. 1867	Thomas Cooke Parson, junr.
Apparatus for cleaning boots and shoes - -	3606	19th Dec. 1867	George Henry Ellis.
Soles for boots and shoes - - - - (*Communicated by John Chilcott.*)	3681	27th Dec. 1867	Alfred Vincent Newton.
Boring, Drilling, Rifling and Punching; Gimlets, Augers and Brace-bits.			
Augers - - - - - - (*Communicated by Amasa C. Kasson and Nelson Coles Gridley.*)	46	7th Jan. 1867	William Edward Newton.
Improvements in the means whereby tools or operating implements, instruments, appliances or parts of machinery or apparatus may be moved to and worked at various parts of articles or surfaces to be operated on by the same. (*boring, drilling or perforating.*) (*Communicated by Norbert Belvallette.*)	105	15th Jan. 1867	Michael Henry.
Certain novel and improved combinations and arrangements of differential wheel gearing, and its application to various purposes - - - (*for boring.*)	125	18th Jan. 1867	Charles Frederick Cooke. John Standfield.
Improvements in apparatus used for boring and tapping gas and water mains, and in fitting service pipes or cocks thereto.	145	19th Jan. 1867	Alfred Upward.
Improvements in engines or machinery for boring or working rock and other material, and in stands for such engines.	296	2nd Feb. 1867	Edward Smith Crease.
Improvements in machine tools for manufacturing parts of locomotive engines, parts of which improvements are also applicable to other similar or analogous purposes. (*drilling railway wheel tire.*)	334	6th Feb. 1867	Stephen Alley.
Drilling machines - - - - -	338	6th Feb. 1867	Andrew Betts Brown.
Machinery or apparatus for boring and planing metals	361	8th Feb. 1867	Henry Allason Fletcher.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
BORING, &c.—*continued.*			
Machines for punching iron or other metal plates -	438	16th Feb. 1867	Richard Hodson.
Machinery for mining, cutting or working coal and other minerals, and for hammering metals and crushing minerals. (*boring holes in minerals.*)	535	27th Feb. 1867	Andrew Howat.
Process and apparatus for perforating tunnels and galleries of mines of great length, through rocks, much quicker than by the process hitherto employed.	575	1st March 1867	Theophilus Berrens.
Machinery for boring and excavating coal and other minerals.	733	14th March 1867	William Read.
A new or improved spring shank applicable to boots and shoes, and in the machinery employed therein - - - - - - (*punching.*)	782	18th March 1867	Alvin Wales Moore. Elias McNeal.
Improvements in machinery or apparatus for raising, lowering and moving heavy bodies, which improvements are also applicable for operating punching machines, screw presses, and the feed motion of circular and other saws and wood-planing machines.	822	21st March 1867	James Alfred Limbert.
Nut-tapping machine - - - - -	847	23rd March 1867	Emile Watteeu.
Improvements in machinery employed in getting coal and other minerals, and in tramways to be used therewith, also in engines to be worked by compressed air or other fluid. (*applicable for boring rock.*)	886	26th March 1867	George Edmund Donisthorpe.
Improvements in applying and fitting the tubes of multitubular boilers, condensers and other like capacities, and in apparatus for the same. (*boring the plates.*) (*Communicated by Victor Langlois.*)	988	2nd April 1867	William Clark.
Needles and other similar articles - - - (*drilling.*)	999	3rd April 1867	John William Scott.
Machinery for actuating tools used in mining or excavating or boring, part of the improved machinery being also applicable for actuating mine or other pumps.	1123	16th April 1867	George Simpson.
Improved machinery for piercing and drilling tangs and scales for table knives and forks, table and butchers' steels, and butchers' knives	1359	8th May 1867	Joseph Nixon. Jabez Winterbottom.
Ratchet levers for actuating drills, screw-drivers, watch-keys and other like instruments.	1360	8th May 1867	Thomas Aldridge Weston.
Improvements in boring gun-barrels and ordnance, and in apparatus used therein. (*Communicated by Joseph Jaspard.*)	1400	11th May 1867	John Piddington.
Boring metals in the solid - - - -	1550	24th May 1867	Thomas Greenwood.
Improvements in brushes and in apparatus for manufacturing the same. (*perforating the stock.*) (*Communicated by Barnard Lavery.*)	1679	7th June 1867	Joseph Sheldon.
Apparatus for punching, cutting and embossing -	1702	10th June 1867	Andrew Linmere Dowie. Robert McIntyre.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
BORING, &c.—*continued.*			
Improvements in engines for boring rock, cutting coal, and boring, cutting or working in other material, and in stands or frames for such engines, the improvements in engines being partly applicable to other purposes.	1704	10th June 1867	Frederick Bernard Dœring.
Drilling machines and hoisting machines - -	1753	15th June 1867	George Allix.
Improvements in guns, projectiles and cartridges, and in the construction of the same. (*rifling guns.*)	1757	15th June 1867	George Clark.
Chucks or apparatus for holding drills or boring tools. (*Communicated by Francis Young.*)	1801	20th June 1867	Louis Sterne.
Improved apparatus for boring or perforating rocks, metals or other substances. (*Communicated by Horric de la Roche Tolay.*)	2027	10th July 1867	William Edward Newton.
New or improved machinery to be employed in the manufacture of watches and chronometers. (*drilling.*)	2032	11th July 1867	Joseph Boyes Fraser.
Machinery for bending, straightening and punching rods, bars and other articles of metal -	2105	18th July 1867	William Barningham. John Thompson.
Improvements in and applicable to hydraulic and other presses, parts of which improvements may be employed for or with other descriptions of machinery - - - - - -	2454	28th Aug. 1867	William Thomas Watts. Daniel Joseph Fleetwood.
Machinery for boring, cutting or working in rock, coal and other mineral.	2503	4th Sept. 1867	Frederick Bernard Dœring.
Anvils - - - - - - (*with punch.*) (*Communicated by James Ezekiel Emerson.*)	2578	11th Sept. 1867	William Edward Newton.
Improvements in machinery or apparatus for cutting or working rocks and other hard substances, chiefly designed for mining, tunnelling and other like operations. (*Communicated by Herman Haupt.*)	2607	16th Sept. 1867	James Asbury McKean.
Means or apparatus employed in drilling, surfacing, cutting and ornamenting metal, wood and other substances.	2732	27th Sept. 1867	Frank Branscombe.
Machinery for moulding, perforating and pressing bricks and other articles.	2791	4th Oct. 1867	Samuel Johnson.
Apparatus for boring holes in stone, shale and minerals - - - - -	2830	8th Oct. 1867	Francis Love. William Armstrong. Levi Widdowson.
Improvements in transmitting motive-power and in mechanism or apparatus employed therefor - (*for boring and screwing machines.*)	3066	31st Oct. 1867	James Tennant Caird. Stewart Robertson.
Mode of and instruments or tools for securing the metal bolts employed in the construction of timber ships and other structures. (*cutting the countersunk holes in the wood.*) (*Communicated by Johann Carl Hammer.*)	3082	2nd Nov. 1867	Matthew Augustus Soul.
Improvements in or applicable to that apparatus known as "Giffard's injector," and in the method of and machinery or tools for making the same. (*tools for boring.*)	3169	9th Nov. 1867	James Gresham.
Couplings for boring tools - - - -	3285	20th Nov. 1867	Thomas Henry Tilley.
An improved tool to be used for cutting rocks or stone and other similar substances.	3311	22nd Nov. 1867	Archibald Munro.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
BORING, &c.—*continued.*			
Merchants' ships and other vessels and appliances connected therewith. (*drilling and rivetting plates.*)	3331	25th Nov. 1867	George Bell Galloway.
Improvements in the manufacture of cutting tools and in the construction of tool holders. (*for boring machines.*)	3339	26th Nov. 1867	John Paterson Smith.
Improvements in machinery for boring rocks, and in apparatus for driving rock-boring, tunnelling, coal-cutting, and other machinery employed in mines, collieries and quarries - - -	3386	29th Nov. 1867	Thomas Brown Jordan. John Darlington.
Improvements in ordnance and in projectiles used therewith, as also in the processes employed in their manufacture. (*rifling guns.*)	3507	10th Dec. 1867	William Palliser.
Improvements in guns, projectiles and cartridges, and in the construction of the same. (*rifling guns.*)	3562	14th Dec. 1867	George Clark.
Machinery for the manufacture of cartridge cases (*piercing.*)	3636	21st Dec. 1867	Edwin Ludlow. Alfred Ludlow.
Construction of cannon and other fire-arms -	3642	23rd Dec. 1867	Charles William Lancaster.
For holeing and drilling coal, *see* "MINING."			
BOTTLES AND JARS; STOPPERS, CAPSULES AND CORKS; STOPPERING, CLOSING AND OPENING BOTTLES AND JARS; CORK-SCREWS; BOTTLE-HOLDERS.			
An improved construction of stopper for closing bottles, jars and other articles.	187	24th Jan. 1867	Francis Hutchinson.
Infants' feeding bottles and breast exhausters -	207	26th Jan. 1867	Joseph Nodder.
Manufacture of envelope cases, blotting books and other articles, commonly called "writing" or "library sets," and other similar articles. (*bottle cases.*)	305	4th Feb. 1867	George William Betjemann.
A self-closing bottle-stopper and key - -	382	11th Feb. 1867	Phineas Davis Collins.
Improvements in cruet frames, liquor frames and other frames for holding bottles and vessels, and in the bottles and vessels to be held by the said frames.	415	14th Feb. 1867	George Ireland.
An improved apparatus for drawing off liquids and supplying them to bottles and other receptacles.	424	15th Feb. 1867	Pierre Duchamp.
Cases or receptacles for bottles and similar articles -	615	5th March 1867	George Withy. Joseph Francis Cotterell.
Stopping bottles, jars and other like vessels - -	689	11th March 1867	Pierre Duchamp.
An improved casing for protecting bottles or other similar articles, also an improved arrangement of machinery or apparatus for manufacturing such casing.	797	19th March 1867	William McAdam. Sigismund Schuman.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
Bottles, &c.—*continued.*			
Improvements in coolers for wine and other liquids and substances, and in vessels for protecting liquids and other substances from undesired effects of the atmosphere or atmospheric temperature, also in covers or stoppers for the same and other articles.	817	21st March 1867	Henry Clifton.
Covers for the tops of bottles, jars and other vessels	826	21st March 1867	William Dredge Player.
Globular and other forms of glass for ornamenting mirrors and other reflecting surfaces, and for making up other articles of glass. (*scent bottles.*)	835	22nd March 1867	Edward Samuel Tucker.
Manufacture of stoppers to be applied to bottles and other receptacles.	869	26th March 1867	Alexander Southwood Stocker.
Improvements in the construction of bottles and other vessels, and in apparatus for closing the same.	916	28th March 1867	Nathan Thompson.
Improvements in decanting or drawing off wines, beer, spirits and other liquids, and in the apparatus employed therein. (*Communicated by Jean Gaudin.*)	921	29th March 1867	John Henry Johnson.
Improvements in the construction of bottles intended to contain malt liquors and other liquids, and in the mode of stoppering, unstoppering and drawing off the contents thereof, the said stoppers being also applicable to bottles of the ordinary kind and other vessels employed to contain liquids, fluids and gases, either separately or in combination.	1033	6th April 1867	William Dennis.
Bowls, jugs, and all kinds of covered and uncovered articles or vessels made of glass, china, stone or earthenware and other plastic materials.	1174	23rd April 1867	Elisha Leigh.
Apparatus for storing and drawing off beer, wine and other materials.	1289	2nd May 1867	Charles Ritchie.
Improvements in washing and cleaning bottles, and in the apparatus employed therefor.	1372	9th May 1867	Matthew Fleming.
Apparatus for stopping bottles and other vessels -	1437	15th May 1867	William Drake Tate.
Improvements in cruet frames, liquor frames, pickle frames, and other frames for holding bottles and vessels, and in the bottles and vessels to be held in the said frames.	1711	11th June 1867	Charles Toft.
Corking, stopping and securing the contents of champagne and other bottles. (*Communicated by Jeules Fisse and Gustave Thirion.*)	1899	29th June 1867	Percy Smith.
Improvements in stoppering bottles and in the apparatus to be employed therein.	1921	2nd July 1867	William Duce.
Liquor frames and other frames for holding bottles and vessels.	1985	6th July 1867	Charles Toft.
An improved stopper for bottles, jars, casks and other vessels - - - -	2021	10th July 1867	Howard Busby Fox. James Turner Hall.
The combination of a bottle and compass, and the mode of combining the same.	2074	15th July 1867	Gustav Boehm.
Machinery for washing bottles, casks and other vessels.	2135	22nd July 1867	John Walker.
Manufacture of capsules. (*Communicated by Florentin Aubey.*)	2151	24th July 1867	William Betts.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
Bottles, &c.—*continued.*			
Metallic capsules for bottles and other like receptacles.	2339	14th Aug. 1867	William Betts.
Metallic capsules for bottles and other like receptacles.	2340	14th Aug. 1867	William Betts.
Machinery for cutting corks - - -	2360	16th Aug. 1867	John William Dudley.
An improved rack for mineral or aërated waters or other liquids in bottles.	2384	20th Aug. 1867	Walter Burrow.
Improvements in bottles and in the manufacture of caps or covers for the same.	2387	20th Aug. 1867	Alexander Southwood Stocker.
Means of stopping or closing bottles and other vessels of capacity.	2418	23rd Aug. 1867	Daniel Taylor.
An improvement in the method of ornamenting bottles, vases and jars used for perfume or toilet purposes.	2570	11th Sept. 1867	Sydney Brown.
A new or improved material to be used as a substitute for oiled silk, bladders, gut-skins, india-rubber, and other waterproof materials and leather. (*for jar covers.*)	2604	14th Sept. 1867	John Jeyes.
Stoppers for bottles, jars and other vessels - -	2829	8th Oct. 1867	Richar Beard, junior.
Corkscrews - - - - - -	2851	10th Oct. 1867	George Twigg.
Stoppers for bottles and other vessels - -	2860	11th Oct. 1867	William Henry May. Peter Graham.
Improvements in stoppers for bottles, which improvements are also applicable to cocks for casks and other like receptacles - - -	2922	18th Oct. 1867	Francisco Prudencio. Frank Cooper. Joseph Francis Cotterell.
Improvements in corks or stoppers for bottles and in machinery for manufacturing the same -	2943	19th Oct. 1867	Leopold Newton. John Swailes.
Improvements in bottles and other like receptacles, and in apparatus for stoppering and unstoppering the same.	2959	21st Oct. 1867	Hesketh Hughes.
Bottling apparatus - - - - - -	2994	24th Oct. 1867	Stephen Stackard.
Improvements in bottles, in corks or stoppers for bottles, and in machinery for making corks or stoppers - - - - - -	3018	26th Oct. 1867	Leopold Newton. Thomas Kershaw.
A new or improved frame or support for packing or carrying bottles in cases, together with a new or improved hinge for boxes and cases.	3085	2nd Nov. 1867	Alfred George Avenell.
Ornamenting bottles and other articles of glass or crystal. (*Communicated by Charles Julien Aubertin.*)	3250	16th Nov. 1867	Clinton Edgcumbe Brooman.
Apparatus for depurating or changing the condition of fluids in process of decantation - -	3315	23rd Nov. 1867	William Needham. James Kite.
An improved process for the reduction of tin so as to render it applicable for coating metals and for other purposes. (*for capsules.*) (*Communicated by Jules Fenquiéres.*)	3517	11th Dec. 1867	Alexander Melville Clark.
Capsules or coverings for bottles and other like vessels.	3543	13th Dec. 1867	George Whitehead.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
BOTTLES, &c.—*continued.*			
Improvements in glass bottle house pot carriages and implements used in setting glass bottle house pots, which invention admits of improvements in the construction of furnaces for melting bottle or other glass in open pots.	3613	19th Dec. 1867	Edgar Breffit.
BOXES, TRUNKS, PORTMANTEAUS, LETTER-BOXES, WORK-BOXES, DRESSING-CASES, CANISTERS.			
An improved "Lady's Companion," consisting of call bell, reel stand and pincushion - -	14	3rd Jan. 1867	Benjamin Nokes. Thomas Sanders.
An improved safety match-box - - - (*Communicated by Henry Arthur Gadsden.*)	124	17th Jan. 1867	Henry Starr.
Ornamenting, printing, cutting, creasing, bending, embossing and manufacturing articles from wood and other materials. (*match boxes.*)	155	22nd Jan. 1867	Edward Tomlinson.
Letter boxes, letter pillars and such like depositories.	169	23rd Jan. 1867	William Dennis.
Packing bales and boxes of goods - - -	200	25th Jan. 1867	James Clark.
Construction of boxes or apparatus to contain address cards for public distribution - -	226	28th Jan. 1867	Julius Edward Mellin. Clement Henry Ulbricht.
Improved means of fastening and better securing bullion boxes, boxes and other like packages used for containing and conveying other valuable commodities.	282	1st Feb. 1867	Frederick Ashford.
Manufacture of envelope cases, blotting books and other articles, commonly called "writing" or library sets, and other similar articles. (*match, stamp & book boxes, dressing-cases, &c.*)	305	4th Feb. 1867	George William Betjemann.
Metallic cases for preserved food - - - (*Communicated by Joseph Jean Marie Rebours.*)	321	5th Feb. 1867	John Henry Johnson.
A new or improved portable miniature dispensary and instrument case, for the use of medical practitioners and for general purposes.	372	9th Feb. 1867	Edmund Adolphus Kirby.
Improvements in and additions to boxes for containing metallic pens and other small articles.	374	9th Feb. 1867	Friedrich Leonardt.
Apparatus for the reception of monies paid as fares in omnibuses and other vehicles.	554	28th Feb. 1867	Robert Edwards Guy.
Cases or receptacles for bottles and similar articles -	615	5th March 1867	George Withy. Joseph Francis Cotterell.
Manufacture of boxes for containing, preserving and transporting butter and cheese and other articles. (*Communicated by William Bellamy Guernsey.*)	740	14th March 1867	William Edward Newton.
A travelling trunk, bath and cradle combined -	773	18th March 1867	William Henry Bailey.
An improved apparatus for manufacturing boxes from sheets of paper, metal and other material. (*Communicated by Bryant Clarke.*)	978	2nd April 1867	William Robert Lake.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
Boxes, &c.—*continued.*			
An improved machine for cutting scale-board, and for the manufacture of the scale-board or material cut by the said machine into an improved fabric for structures generally. (*linings for trunks, packing-cases, boxes, &c.*) (*Communicated by John Kinney Mayo.*)	1051	8th April 1867	William Clark.
Construction of boxes or apparatus to contain address cards for public distribution - -	1144	18th April 1867	Julius Edward Mellin. Clement Henry Ulbricht.
An improved combined taper holder and match box (*Communicated by John A. Whipple.*)	1250	30th April 1867	George Davies.
Cases and boxes for holding needles, pins and other articles.	1260	1st May 1867	Reuben Young.
Cases for packing and transporting butter and other dairy produce.	1546	24th May 1867	Louisa Slatter.
Boxes, drawers and other like receptacles - -	1715	11th June 1867	George Philip Hill.
Manufacture of coal vases, buckets, casks, kegs, bins, baths, sugar funnels and other similar articles of hollow ware.	1786	19th June 1867	David Jones.
Construction of safety box slides - - - (*letter boxes, money boxes, &c.*)	1804	20th June 1867	Heinrich Gottlieb. Bernhard Röber.
An improved tool for opening metallic cases - (*Communicated by A. Hilger.*)	1852	25th June 1867	James Buckingham.
An improved method of adapting paper linings to the interior of casks, cases, and packages of various descriptions.	1885	28th June 1867	Joseph Hélène Viton.
A new or improved combined lamp or match box - (*Communicated by Ludwig Böhler.*)	1947	3rd July 1867	Friedrich Leonardt.
Boxes or cases for holding packets of needles and for other like uses.	2007	9th July 1867	William Avery.
Improvements in the manufacture of cylindrical metallic cases and in the machinery or apparatus employed therefor - - -	2033	11th July 1867	John Sharp Henderson. John Macintosh.
Means and apparatus for ornamenting, printing, coloring, enamelling, staining, cutting, creasing, bending, and manufacturing articles from wood and other materials.	2139	23rd July 1867	Edward Tomlinson.
Letter boxes, letter pillars, and such like depositories	2141	23rd July 1867	William Dennis.
Boxes or apparatus for holding pieces of paper or other material for use or distribution.	2215	31st July 1867	John Christopher César Azémar.
An improved case or box for holding twine or cord	2293	9th Aug. 1867	Frederick Julius Seymour.
Uniting and treating iron, steel and other metals in sheets, plates, rails, bars, rods, links, bands, hoops, tubes or other formes, applicable to navigable vessels, forts, guns, bridges, roofs, floors, boilers, heaters, tanks, chests or like structures.	2376	19th Aug. 1867	William Bridges Adams.
Improvments in the manufacture of metallic cases or canisters, and in the machinery or apparatus employed therefor - - - -	2516	5th Sept. 1867	John Sharp Henderson. John Macintosh.
A new or improved cucumber box - - - (*see* "Horticulture.")	2567	10th Sept. 1867	John Pottle.
Method of and materials for manufacturing ammunition boxes, pontoons, baggage and other waggons and carriages, and various equipments for military, naval and civil purposes. (*trunks, portmanteaus, despatch cases, &c.*)	2630	19th Sept. 1867	Thomas Charles Clarkson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
Boxes—*continued.*			
Match boxes - - - - - - (*Communicated by Réyis de Monti.*)	2764	1st Oct. 1867	William Edward Gedge.
Utilizing refuse animal matters and producing skins and sheets therefrom. (*for box and case covering.*)	2822	7th Oct. 1867	John Harcourt Brown.
Construction of letter boxes, pillar letter boxes, and money and other such like boxes.	2948	19th Oct. 1867	Maurice William Shove.
Dressing and other bags - - - - - (*with box at bottom.*)	3007	25th Oct. 1867	Thomas Stennett.
A new or improved frame or support for packing or carrying bottles in cases, together with a new or improved hinge for boxes and cases.	3085	2nd Nov. 1867	Alfred George Avenell.
Improvements in the method or means for preserving pasty matters and substances, and apparatus therefor. (*Communicated by Edouard Charton.*)	3129	6th Nov. 1867	Henri Adrien Bonneville.
Improvements in the construction of packing cases, and in the mode of locking the same to secure them against clandestine opening.	3328	25th Nov. 1867	George Turner.
An improved cutting implement more especially designed for opening cases or cans formed of sheet metal.	3365	27th Nov. 1867	Milton Alexander Hamilton.
Improvements in circular boxes for the purpose of abstracting their contents without removing the lid or cover.	3449	4th Dec. 1867	Robert Michael Letchford.
Treatment of paper and certain woven fabrics for rendering them ornamental and durable as articles of dress, and for decorative and ornamental purposes. (*ornamental cases or boxes.*)	3535	12th Dec. 1867	Edward Reed Sintzenich.
Musical boxes - - - - -	3603	18th Dec. 1867	Onésime Aristide Hébert.
Construction of bags, portmanteaus and other similar articles.	3638	21st Dec. 1867	Ignac Pick.
Bread, Biscuits and Pastry; Bakers' Ovens.			
Improvements in bakers' and other ovens, and also in scrap and other furnaces.	80	11th Jan. 1867	John Tomlinson.
A new or improved article of food for infants and invalids. (*Partly communicated by Baron Justus Von Liebig.*)	250	30th Jan. 1867	Elise Von Lesner Ebersburg.
An improved preparation of biscuit and other pastry and bread.	766	16th March 1867	James Hickisson.
Hot-air ovens for baking bread, biscuits, pastry, cooking, drying or desiccating flour and other materials.	1853	25th June 1867	Henry Veillon.
Apparatus employed in the heating of bakers' ovens.	2348	15th Aug. 1867	John Cosgrave.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
BREAD, &c.—*continued.*			
Improvements in bread ovens and in their combination with various apparatus for the manufacture of bread. (*Communicated by Thomas Caruso and Joseph Augustin Garau.*)	2650	20th Sept. 1867	Samuel Dreyfous.
Ozonized or oxygenated bread, biscuits, cakes and other substances.	2976	23rd Oct. 1867	Thomas Welton.
Manufacture of wheaten flour and bread - -	3120	5th Nov. 1867	Robert Palmer. Henry Samuel Hird.
Kneading machines - - - - (*Communicated by George King.*)	3224	14th Nov. 1867	George Kent.
Combination and mode of treating and employing certain preparations for various articles of food -	3275	19th Nov. 1867	William Juby Coleman. Alfred Coleman.
Improvements in the manufacture of soda and other ærated waters, and in the manufacture of ærated bread.	3573	16th Dec. 1867	William Huskisson the younger.
BREAKS, SKIDS AND BUFFERS FOR CARRIAGES AND RAILWAYS.			
Tramways and carriages for streets and ordinary roads. (*applying break blocks.*)	232	29th Jan. 1867	John Haworth.
Breaks and apparatus for giving motion to machinery.	299	2nd Feb. 1867	Robert David Napier.
Improvements in railway engines and carriages, and in railways applicable for the purpose of locomotion on inclines, and also for retarding and stopping such engines and carriages. (*Communicated by Pierre Ambjorn Comte de Sparre.*)	493	22nd Feb. 1867	Michael Henry.
Improvements in signalling on railways and in apparatus connected therewith. (*and stopping the engine.*)	518	26th Feb. 1867	George Daws.
Buffing springs and parts connected therewith -	704	12th March 1867	Henry Lee Corlett.
Apparatus for stopping or retarding railway trains	807	20th March 1867	Gilbert Amable Laurent.
Brakes for common road carriages - -	821	21st March 1867	Leonard Latter.
A new or improved safety carriage or vehicle, comprising an instantaneous unyoking or releasing apparatus, a break and apparatus connected therewith.	875	26th March 1867	Auguste Frédéric Laugin.
A new and improved railway brake - - (*Communicated by Eugène Hippolyte Duru.*)	975	2nd April 1867	Henri Adrien Bonneville.
Arrangement of railway brakes - - -	1111	13th April 1867	Alfred Andrew Langley.
An improvement in the construction of buffers -	1328	6th May 1867	George Wilson.
An improved railway break - - -	1338	7th May 1867	Robert Marsden. Urias Bromley.
Springs for buffers and bearings and for other purposes.	1369	9th May 1867	Thomas Aldridge Weston.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
BREAKS, &c.—*continued.*			
Improvements in machinery or apparatus for communicating between passengers in railway carriages and the guard and driver of railway trains, and improved self-acting breaks applicable also to other carriages or vehicles.	1379	9th May 1867	Ratcliffe Andrew.
Improvements in railway breaks and in the means of applying the same.	1420	13th May 1867	John Clark.
Railway buffers - - - - -	1543	24th May 1867	Clement Martin. James Grint.
An improved apparatns for utilizing the power spent in stopping or retarding the motion of carriages and other vehicles and machinery, as also the power produced by carriages and other vehicles when moving down inclines. (*Communicated by Jules Péan.*)	1762	17th June 1867	Charles Denton Abel.
Improvements in railway carriages and in brakes for the same. (*Communicated by Samuel Augustus Chase.*)	1764	17th June 1867	William Robert Lake.
Improvements in stop-blocks and buffer stops to be used upon railways, part of which improvements is also applicable to the working of points on railways.	1793	19th June 1867	Henry Columbus Hurry.
Railway buffers - - - -	1794	19th June 1867	Walter MacLellan.
Apparatus for starting, propelling and stopping railway trains or carriages, and ships or vessels.	2465	29th Aug. 1867	William Muir.
Brakes for railway trains, parts of which can be used or applied for signalling on trains in motion.	2483	2nd Sept. 1867	Richard Watson.
An improved construction of railway buffer -	2519	5th Sept. 1867	James Baird Handyside.
A new and improved railway brake - - (*Communicated by Leleux Bernard.*)	2598	14th Sept. 1867	Henri Adrien Bonneville.
Method of and materials for manufacturing ammunition boxes, pontoons, baggage and other waggons and carriages, and various equipments for military, naval and civil purposes. (*blocks for buffer springs.*)	2630	19th Sept. 1867	Thomas Charles Clarkson.
Pneumatic springs specially applicable to railway rolling stock. (*Communicated by Joseph Dauley.*)	2810	5th Oct. 1867	John Piddington.
Improvements applicable to railway trains for the prevention of accidents arising from collisions or other casualties on railways.	2884	14th Oct. 1867	Matthew Fitzpatrick.
Apparatus for transmitting alarm signals and applying brake power in railway trains. (*Communicated by Jean Baptiste Jolly.*)	2889	14th Oct. 1867	Marc Antoine François Mennons.
Improvements in the construction of railways and railway carriages, and in the means for propelling the said carriages. (*checking motion of propelling cables.*) (*Communicated by Charles Thompson Harvey.*)	2896	15th Oct. 1867	William Robert Lake.
Improvements in locomotive engines, vehicles and appendages thereto, for better and safer working on railways, tramways and common roads.	2907	17th Oct. 1867	William Bridges Adams.
Apparatus for compressing air and for working pneumatic railways.	2978	23rd Oct. 1867	Frederic Seiler.
Buffers and draw springs for railway carriages -	2992	24th Oct. 1867	Joseph Mitchell.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
BREAKS, &c.—*continued.*			
Railway and other brakes - - - (*Communicated by Martin Henri Rumpf.*)	3026	26th Oct. 1867	Alexander Melville Clark.
Railway and other brakes - - - (*Communicated by Désiré Parfait Lefèvre and Louis Philippe Dorré.*)	3119	5th Nov. 1867	Edward Charles Vine.
A method of attenuating the effect of shocks or concussions between engines, carriages or waggons composing a railway train.	3223	14th Nov. 1867	Paul de Bavay.
Improvements in apparatus for rendering innocuous the momentum of heavy bodies so as to prevent injury and damage from concussion, applicable to ships' cables, cranes, windlasses, capstans, hoists, lifts, weighing machines, ship and fort armour, to training guns, to railway trains, station buffers, fenders to pier heads, gangways, breakwaters and other similar structures, which apparatus is also applicable for storing and accumulating power, which may be used for throwing projectiles, raising or moving heavy weights, such as ships, stranded or sunken vessels, propelling carriages and other purposes.	3302	21st Nov. 1867	William Graham McIvor.
Improvements in breaks for railway and other carriages, and in signalling and other apparatus in connection therewith, which improvements are also partly applicable to other purposes.	3597	18th Dec. 1867	Thomas Comfield the younger.
An improved railway carriage-break - -	3658	24th Dec. 1867	Pierre Demeure.
Certain improvements in railway breaks - -	3676	27th Dec. 1867	Joseph Cockshoot, junr. Henry Weatherill.
Brakes applicable to carriages and other vehicles -	3718	31st Dec. 1867	Archibald Allan.
BREWING, FERMENTING, MAKING FERMENTED AND UNFERMENTED BEVERAGES; TREATING MALT AND HOPS.			
Improved machinery for pocketing hops, for puddling dams, for punning at back of long retaining walls, river or sea embankment facings and such like works.	57	9th Jan. 1867	Richard Winder.
Preparation of finings for fining or clearing fermented liquors.	130	18th Jan. 1867	Douglas William Hamper.
Improvements in the heating of malt kilns and other apparatus of a similar character, and the warming of the interiors of churches and other large buildings, which invention is also applicable to causing the consumption of smoke from open fire-places.	249	30th Jan. 1867	Thomas Prideaux.
Constructing and working apparatus for filtering beer and other liquids.	330	6th Feb. 1867	George Arthur Waller.
Preserving animal or vegetable matters, whether fluid or solid, in a wholesome and edible condition, without material loss or change of their natural flavour. (*Communicated by Lewis Hobart Spear.*)	379	9th Feb. 1867	William Clark.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
BREWING, &c.—*continued.*			
Means and apparatus for drying hops - -	520	26th Feb. 1867	William Henry Samson.
Machinery or apparatus for refrigerating purposes, used in breweries and distilleries.	787	19th March 1867	Francis Gregory.
Improvements in coolers for wine and other liquids and substances, and in vessels for protecting liquids and other substances from undesired effects of the atmosphere or atmospheric temperature, also in covers or stoppers for the same and other articles.	817	21st March 1867	Henry Clifton.
Brewers' mash tuns - - - - (*Communicated by James Walker.*)	1150	20th April 1867	John Millward.
Drying machines - - - - - (*for grains, spent hops, &c.*)	1267	1st May 1867	James Lee Norton.
Apparatus for storing and drawing off beer, wine and other materials.	1289	2nd May 1867	Charles Ritchie.
Improvements in casks and in apparatus for storing and drawing off liquids and semi-fluid matters.	1380	9th May 1867	Charles Ritchie.
An improved method of and apparatus for drawing off and refining liquors or liquids of any kind.	1421	13th May 1867	William Sodo.
Improvements in the means of raising liquids and in apparatus for the same. (*Communicated by Pierre Léon Margot, jun'.*)	1427	14th May 1867	Alexander Melville Clark.
Drying malt and also brewers' and distillers' grains and spent hops.	1485	18th May 1867	James Lee Norton.
Apparatus for and modes of revivifying malt liquors and other beverages, and for warming them.	1698	10th June 1867	James Crompton.
Improving wine on draft, and of apparatus to be used for this object, which invention is also applicable to other liquids.	1729	13th June 1867	Thomas Symes Prideaux.
Refrigerators for cooling worts and other liquids -	1738	14th June 1867	Charles Askew.
Improvements in the means of cooling beverages, also applicable for preserving substances from the action of heat. (*Communicated by Auguste Charles Joseph Lengelée and Paul Frederic Rozee.*)	1751	15th June 1867	Alexander Melville Clark.
Apparatus for the manufacture of iced beverages - (*summer drinks.*) (*Communicated by Gustave D. Dows, Adolphe Clarck and Abraham Van Winkle.*)	1875	27th June 1867	William Edward Newton.
Refrigerators or apparatus for cooling worts and other liquids.	1988	6th July 1867	George Severn.
Improvements in refrigerators for cooling worts and other liquids, which improvements are also applicable to condensers used in distillation -	2031	11th July 1867	Joseph Stirk. Horatio Bycroft.
Apparatus for drying grain, seeds, malt, spent hops, brewers' and distillers' grains, hops, wool, rags and other materials.	2071	13th July 1867	James Lee Norton.
Apparatus for drawing or raising beer and other malt or spirituous liquors to a higher level than that of the cask or other vessel in which they are kept.	2081	15th July 1867	James Fleming.
Improved means and apparatus for "malting" or drying barley, part of which means and apparatus is also applicable to other purposes -	2095	17th July 1867	James Schofield. Joshua Caleb Dawson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
BREWING, &c.—*continued.*			
An improved means of allowing the escape of superfluous carbon from casks of newly-made wine, cider, perry and other fermenting liquors.	2122	20th July 1867	Thomas Bromwich.
Pipes for ventilating, heating and vaporizing hothouses, malthouses and other buildings and residences.	2125	20th July 1867	William Taylor.
Certain processes of manufacturing extract and essence of hop, to be substituted for the plant itself in the making of beer.	2132	22nd July 1867	Theophile Auguste Breithaupt.
Improvements in brewing and in apparatus employed therein. (*Communicated by William Sylvanus Haight.*)	2137	22nd July 1867	William Edward Newton.
A refrigerator for cooling wort - - -	2258	5th Aug. 1867	James Dale.
Cooling brewers' worts and beer - - -	2330	13th Aug. 1867	Charles Edward Flower.
Presses for extracting liquid from hops, seeds and other substances.	2540	7th Sept. 1867	Hamilton Woods.
Improvements in separating yeast from liquid matters and in apparatus to be used therefor.	2652	20th Sept. 1867	William Hall.
Improvements in refrigerators for cooling worts and other liquids, which improvements are also applicable to condensers.	2707	26th Sept. 1867	James Oxley.
Improvements in apparatus applicable to the conversion of cereal and vegetable substances into saccharine matter, in treating and purifying saccharine substances extracted from malt, fruits and vegetables, in treating fatty matters, and in the manufacture of chemical products - -	2760	1st Oct. 1867	George Allibon. Alexandre Manbré.
An improved apparatus for drying corn, malt or other similar substances.	2804	5th Oct. 1867	John Stonehouse Williamson.
Cooling or refrigerating water - - -	2944	19th Oct. 1867	John Schwartz.
Ozonized or oxygenated bread, biscuits, cakes and other substances. (*barley in malting.*)	2976	23rd Oct. 1867	Thomas Welton.
Improvements in apparatus for stirring or agitating solid substances, and for exposing them to the action of the air, gases and vapours. (*agitating grain when malting.*)	3124	5th Nov. 1867	Arthur McDougall.
Process and apparatus employed for ageing and refining wines, alcoholic spirits and other liquors. (*Communicated by Reuben Daniel Turner.*)	3260	16th Nov. 1867	John Garrett Tongue.
Treatment of the solution of malt for brewing -	3359	27th Nov. 1867	Edward Belknap.
An improved mode of preserving vegetable juices -	3499	9th Dec. 1867	Lauchlan Rose.
Improved apparatus for filtering liquids - - (*wines, &c.*)	3503	10th Dec. 1867	Cornelius Kerby.
Improvements in the extraction of ammonia from fermented and other liquids, and in the regeneration of the agents used in such extraction. (*Communicated by Armand Coste and Louis Taupin De Rosnay.*)	3566	14th Dec. 1867	Alexander Melville Clark.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
Bricks, Tiles and Building-blocks.			
Mode of and machinery for manufacturing bricks, tiles and other articles of clay.	151	21st Jan. 1867	Robert Hunstmann.
Construction and arrangement of kilns and ovens - (*for bricks and tiles.*)	290	2nd Feb. 1867	John Gilbert Robinson.
Improvements in bricks whereby to facilitate the attachment or fastening of anything to walls of such bricks or in which such bricks are inserted.	329	6th Feb. 1867	John Foxley.
Machinery for moulding and pressing bricks - (*Communicated by Emery Ross Gard.*)	403	13th Feb. 1867	William Clark.
Utilizing a certain description of clay and a substance usually found therewith. (*for making bricks.*)	551	27th Feb. 1867	Alexander McDougall.
Ovens and kilns for drying and burning bricks and other articles.	562	28th Feb. 1867	Jacob Buhrer.
Apparatus for the manufacture of bricks, tiles and other articles of plastic material. (*Communicated by Frederick Hertel.*)	954	30th March 1867	William Clark.
Machinery for the manufacture of bricks and similar moulded articles.	1006	3rd April 1867	William Hodson.
Machinery for manufacturing bricks - - - (*Communicated by Richard Alexander Douglas.*)	1078	11th April 1867	William Robert Lake.
An improvement in the manufacture of bricks and other materials, without the aid of artificial heat, for hydraulic and other purposes.	1147	20th April 1867	William Kirrage.
Machinery for preparing clay and for making bricks, tiles and similar articles.	1316	4th May 1867	Thomas Russell Crampton.
Brick-making machines - - - (*Communicated by John Scott Meredith and John Hanson Mitchell.*)	1393	10th May 1867	William Clark.
Manufacture of artificial granite and other artificial bricks and blocks suitable for buildings, engineering structures, pavements and other similar purposes. (*Communicated by Pierre Rodolphe Pozzi.*)	1458	17th May 1867	Perceval Moses Parsons.
A new or improved method for producing ornamental bricks for building purposes and in apparatus therefor.	1569	28th May 1867	Henry Pether.
Construction of walls, buildings and other similar structures. (*forming the blocks.*)	1639	3rd June 1867	Samuel Harwood.
An improved combination of material to be used in the manufacture of "drain bottoms," flue slabs, bricks and other like purposes.	1732	13th June 1867	John Holmes.
Brick-making machines - - - -	1922	2nd July 1867	William Steven. Anselm Robertson.
Improved machinery for making bricks for building and other purposes, and of coal, peat or other substances to be used as fuel.	2028	10th July 1867	George Roughton. Bromage Amott.
Brick-making machinery - - - -	2128	20th July 1867	Robert Shaw. John Stirk.
Machinery for moulding clay for making bricks, tiles and other analogous articles from plastic substances.	2158	25th July 1867	Charles Henry Murray.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
BRICKS, &c.—*continued.*			
Machinery for moulding, perforating and pressing bricks and other articles.	2791	4th Oct. 1867	Samuel Johnson.
Kilns for burning pipes, tiles, bricks, pots and earthenware.	2991	24th Oct. 1867	Henry Adcock.
Manufacture of grindstones and other blocks or forms of artificial stone - - - - (*tiles.*)	3193	11th Nov. 1867	Frederick Ransome. Henry Bessemer. Ernest Leslie Ransome.
Machines for pressing or moulding bricks, tiles or other blocks. (*Communicated by John North.*)	3196	12th Nov. 1867	Henri Adrien Bonneville.
New and useful machinery for making, drying and burning bricks and tiles, applicable in part to baking pottery ware.	3220	13th Nov. 1867	Peter Edward Bland.
Manufacture of artificial granite suitable for buildings, engineering structures, pavements and other similar purposes. (*Communicated by Pierre Rudolph Pozzi.*)	3234	15th Nov. 1867	Perceval Moses Parsons.
An improved hollow brick or block to be used for the floors, ceilings and other parts of buildings, and apparatus for moulding or manufacturing the same. (*Communicated by François Louis Sabrout.*)	3377	28th Nov. 1867	John Henry Johnson.
Improvements in the manufacture of fire-bricks, tiles, and solid or hollow fire-lumps, and in the manufacture of retorts, pipes, crucibles or other hollow vessels or moulds required to resist a high degree of heat, and also in the manufacture of ornamental bricks, tiles, quarries, trusses, bosses, vases, busts, figures, columns, capitals, bases, cornices, copings, tablets, finials, and other articles of an ornamental character employed in building and in architectural decorations.	3501	9th Dec. 1867	Henry Bessemer.
Machinery for the manufacture of bricks and tiles -	3534	12th Dec. 1867	Peter Bawden.
Means of and apparatus for obtaining and applying hydrogen gas to the furnaces of steam engines, boilers and kilns for the manufacture of bricks and lime.	3580	16th Dec. 1867	James Standfield.
BRIDGES, VIADUCTS AND AQUEDUCTS.			
Improvements in the mode of and apparatus for manufacturing beton, and in the method of applying beton for certain constructive or structural purposes. (*for bridges, viaducts and aqueducts.*) (*Communicated by François Coignet.*)	77	11th Jan. 1867	Michael Henry.
Improvements in constructing quays, jetties, piers, sea walls and breakwaters, in the formation of reservoirs, dock basins, coast harbours, harbours of refuge, lighthouses and sea batteries, applicable also for the reclamation of land and for the building of bridges.	79	11th Jan. 1867	Henry Buss.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
BRIDGES, &c.—*continued.*			
Breaks and apparatus for giving motion to machinery. (*screwing down bridge piles.*)	299	2nd Feb. 1867	Robert David Napier.
Uniting iron and steel in sheets, plates, rails, bars, rods, links, bands, hoops, tubes or other forms, applicable to navigable vessels, forts, bridges, roofs, floors, tanks or chests.	469	21st Feb. 1867	William Bridges Adams.
Construction of suspension bridges - -	994	3rd April 1867	Andrew Smith Hallidie.
An improved machine for cutting scale-board, and for the manufacture of the scale-board or material cut by said machine into an improved fabric for structures generally. (*for suspension bridges.*) (*Communicated by John Kinney Mayo.*)	1051	8th April 1867	William Clark.
An improvement in the manufacture of bricks and other materials, without the aid of artificial heat, for hydraulic and other purposes. (*for arches.*)	1147	20th April 1867	William Kirrage.
Manufacture of steel tyres, rails, axles, bridge links, shafting, and other articles where uniformity in the wearing surfaces and increased durability is required.	1327	6th May 1867	George Wilson.
Improvements in the construction of a steam vessel suitable for ferrying laden trains across the ocean, complete, together with its landing-places, breakwaters, and modes of protection from marine insects and fouling, which improvements are also generally applicable to other vessels, and to the protection of iron and wood exposed to the action of the sea water. (*balance bridges.*)	1503	21st May 1867	Edward Henry Cradock Monckton.
An improved pontoon bridge, also applicable as a life raft and lighter. (*Communicated by John Wright.*)	1723	12th June 1867	John Cochrane.
Suspension bridges and other structures in which girders are employed.	2018	10th July 1867	James Edward Whiting.
Uniting and treating iron, steel and other metals in sheets, plates, rails, bars, rods, links, bands, hoops, tubes or other formes, applicable to navigable vessels, forts, guns, bridges, roofs, floors, boilers, heaters, tanks, chests or like structures.	2376	19th Aug. 1867	William Bridges Adams.
Method of and materials for manufacturing ammunition boxes, pontoons, baggage and other waggons and carriages, and various equipments for military, naval and civil purposes.	2630	19th Sept. 1867	Thomas Charles Clarkson.
Improvements in the construction of buildings, arches, bridges, and such like structures, and in the floors of buildings, and floors in other situations.	2729	27th Sept. 1867	Samuel Parr. Alfred Strong.
Bridges, piers and landing stages - - -	2886	14th Oct. 1867	Henry Nathan Maynard.
A telescopic apparatus applicable as a temporary or stationary observatory for temporary bridges, building and other purposes.	2969	22nd Oct. 1867	William Beale.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
BRIDGES, &c.—*continued.*			
Improvements in the construction of buildings, arches, bridges, coffer-dams, wharf walls, and such like structures, and in the floors and roofs of buildings, and floors in other situations -	3080	2nd Nov. 1867	Samuel Parr. Alfred Strong.
Manufacture of flexible air-tight cylinders or cases to be used as pontoons and in forming rafts.	3175	9th Nov. 1867	George Frederick Parratt.
Construction or arrangement of piles or fagots for wrought-iron beams, girders or bars of different forms. (*for bridges.*) (*Communicated by George Walters and Thomas Shaffer.*)	3355	27th Nov. 1867	John Henry Johnson.
An improved brake-washer - - - (*for bridges.*) (*Communicated by Arthur Dillon-Corneck.*)	3399	30th Nov. 1867	William Edward Gedge.
Caissons - - - - - -	3526	12th Dec. 1867	Jonathan Robert Baillie.
BRUSHES AND BROOMS; BRUSHING AND WAXING APARTMENTS.			
Improvements in brushes for brushing hair by rotary motion, and in apparatus connected therewith.	508	23rd Feb. 1867	Charles Turner.
Mode or means of rotating brushes or other articles for which a circular or revolving motion is required.	767	16th March 1867	Stephen Holness.
An improved mode of making brooms - - (*Communicated by Eli P. Cooley.*)	958	30th March 1867	Henri Adrien Bonneville.
An improved apparatus for sweeping carpets, floors and surfaces.	1197	25th April 1867	Samuel Leake Worth.
An improved apparatus for cleaning or brushing boots and shoes.	1483	18th May 1867	George Haynes.
Racks or holders for whips, canes and other like articles. (*for brooms.*) (*Communicated by Edward Richmond.*)	1647	4th June 1867	John Henry Johnson.
Improvements in brushes and in apparatus for manufacturing the same. (*Communicated by Barnard Lavery.*)	1679	7th June 1867	Joseph Sheldon.
Improvements in the manufacture of brushes and in the machinery or apparatus employed therein. (*Communicated by Lewis M^{c}Donald Hills.*)	1730	13th June 1867	Edward Thomas Hughes.
Brushes - - - - - - (*Communicated by Henry Rosenthal.*)	2090	16th July 1867	Henri Adrien Bonneville.
Knife-cleaning machines - - - - (*construction of brush.*)	2094	17th July 1867	George Weedon.
Brushes - - - - - -	2450	28th Aug. 1867	William Pedder.
Arrangement and construction of street sweeping and cleaning machines.	2845	9th Oct. 1867	William Warren.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
BRUSHES, &c.—*continued.*			
Racks or holders for whips, canes and other like articles. (*for brooms.*) (*Communicated by Edward Richmond.*)	3058	30th Oct. 1867	John Henry Johnson.
Manufacture of backs and handles for brushes -	3089	2nd Nov. 1867	James Joseph Hicks.
Apparatus for applying bronze and other powders on paper and other surfaces. (*Communicated by Jacques Laurent Poirier.*)	3229	14th Nov. 1867	Alexander Melville Clark.
Apparatus for brushing, combing, cleansing, drying and perfuming hair.	3254	16th Nov. 1867	Charles Ritchie.
The manufacture of a vegetable substitute for animal hair, from a product not hitherto used for that purpose. (*substitute for bristles.*) (*Communicated by Werner Staufen.*)	3707	31st Dec. 1867	Marc Antoine François Mennons.
BUILDING, PLASTERING, FLOORING AND ROOFING; WALLS, CEILINGS AND CORNICES; LADDERS AND BUILDING-STAGES.			
Improvements in the mode of and apparatus for manufacturing beton, and in the method of applying beton for certain constructive or structural purposes. (*for arches and roofs.*) (*Communicated by François Coignet.*)	77	11th Jan. 1867	Michael Henry.
A new or improved compound material or substance to be used for binding books, for panelling, and for other purposes where strength and lightness are required.	90	14th Jan. 1867	Frederick Brampton.
Horticultural buildings or glazed structures for horticultural and other purposes.	294	2nd Feb. 1867	William Richardson.
Collection and storage for distribution of rain-water. (*sloping roof, &c.*)	359	8th Feb. 1867	Arthur Ormsby.
Constructing the floors and roofs of houses and other buildings.	452	19th Feb. 1867	Henry Young Darracott Scott.
Construction of floors for buildings - -	459	20th Feb. 1867	Richard Moreland, junior.
Uniting iron and steel in sheets, plates, rails, bars, rods, links, bands, hoops, tubes or other forms, applicable to navigable vessels, forts, bridges, roofs, floors, tanks or chests.	469	21st Feb. 1867	William Bridges Adams.
Improvements in tent poles for regulating the tension from the interior of the tent or marquee.	600	4th March 1867	Edward Deane.
Certain improvements in the manufacture of metallic bedsteads, part of which said improvements are applicable to cornice poles, gas fittings, balustrades and other like articles - -	639	7th March 1867	Robert Luke. William Parkes.
An improved cramping and lifting apparatus - (*used in forming floors.*) (*Communicated by Henry Hitchings Baragwanath.*)	742	14th March 1867	John Phillipe Baragwanath.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
BUILDING, &c.—*continued.*			
Construction of floors and rooms for buildings -	885	26th March 1867	Richard Moreland,
Fittings for stables, harness rooms and cowhouses -	993	3rd April 1867	James Musgrave.
An improved lifting machine applicable as a fire-escape and for repairing and decorating houses and other buildings.	1025	5th April 1867	Edward Beningfield.
An improved machine for cutting scale-board, and for the manufacture of the scale-board or material cut by said machine into an improved fabric for structures generally. (*roofing, floors, &c.*) (*Communicated by John Kinney Mayo.*)	1051	8th April 1867	William Clark.
An improvement in the manufacture of bricks and other materials, without the aid of artificial heat, for hydraulic and other purposes. (*window sills, steps, landings, copings, roofs, &c.*)	1147	20th April 1867	William Kirrage.
Construction of tents by lacing instead of buttoning as heretofore, and transforming the same into ambulances to carry crippled and wounded men. (*Communicated by Alfred Varnier.*)	1209	26th April 1867	James Archibald.
Construction of fire-proof floors - - -	1220	27th April 1867	Daniel Birkett.
Buildings and structures to be employed for horticultural uses.	1268	1st May 1867	Samuel Newington.
Construction of fire-proof and other ceilings and floors.	1270	1st May 1867	John Thomlinson.
Construction of flights of stairs commonly called staircases. (*Communicated by Antoine Garzend.*)	1278	2nd May 1867	Charles Hastings Collette.
Ornamental balusters and balustrades, and other ornamental rails. (*for staircases and balconies.*)	1364	8th May 1867	Henry Richard Cottam.
Improvements in preserving grain and in the construction of the granaries to contain the same.	1527	22nd May 1867	Antoine Martin.
Construction of parquet flooring - -	1548	24th May 1867	George Howard.
Construction of walls, buildings and other similar structures.	1639	3rd June 1867	Samuel Harwood.
Improvements in the construction and manufacture of iron or metal rail rods or bars for balconies, gates, railings, pillars, standards or columns and other useful purposes, and also in the machinery employed therein.	1739	14th June 1867	Stephen Tuddenham.
A new and useful fire-proof safe - - - (*and bank vaults.*)	1741	14th June 1867	Hezekiah Hazard Bryant.
Apparatus for hoisting building materials - -	1855	25th June 1867	William Cooke.
Construction or arrangement of blocks of so-called workmen's dwellings.	1911	29th June 1867	Edward Sephton.
Suspension bridges and other structures in which girders are employed. (*roofs.*)	2018	10th July 1867	James Edward Whiting.
Construction of the roofs of horticultural and other buildings and structures - -	2150	24th July 1867	William Simpson. William Howitt.
Improvements in machinery for cutting grooves in knotch boards of stairs, ladder strings, uprights for louvre boards, and in other articles requiring such grooves.	2332	13th Aug. 1867	Thomas Walker.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
BUILDING, &C.—*continued.*			
Uniting and treating iron, steel and other metals in sheets, plates, rails, bars, rods, links, bands, hoops, tubes or other formes, applicable to navigable vessels, forts, guns, bridges, roofs, floors, boilers, heaters, tanks, chests or like structures.	2376	19th Aug. 1867	William Bridges Adams.
An improved illuminating roof and roof pavement (*Communicated by Thaddeus Hyatt.*)	2539	7th Sept. 1867	Benjamin Franklin Stevens.
Improvements in the mode of covering roofs with slate or other materials, which improvements are applicable also to the covering or forming of walls.	2612	17th Sept. 1867	William Le Duc.
Improvements in the construction of buildings, arches, bridges and such like structures, and in the floors of buildings and floors in other situations - - - - - -	2729	27th Sept. 1867	Samuel Parr. Alfred Strong.
An improved lifting machine applicable as a fire-escape, and for repairing and decorating houses and other buildings.	2824	8th Oct. 1867	Edward Beningfield.
An improved mode of preparing iron for the manufacture of various articles where great strength and capability of resistance to tensile strain or torsion is required. (*for ladders, staircases, balusters, &c.*) (*Communicated by Michel Pawlowitch Lwoff.*)	2865	11th Oct. 1867	William Edward Newton.
Construction of flights of stairs commonly called staircases. (*Communicated by Antoine Garzend.*)	2869	12th Oct. 1867	Charles Hastings Collette.
Improvements in the economical construction of buildings, also in rendering them more secure from fire and damp, and in preserving them from decay.	2878	12th Oct. 1867	Benjamin Nicoll.
Improvements in ceiling cornices and centres, and other indoor ornaments of a similar nature, and in the mode of fixing the same.	2938	19th Oct. 1867	Francis William Waide.
Improvements in the manufacture of felts and in machinery connected therewith. (*for roofing.*)	2946	19th Oct. 1867	James Anderson.
A telescopic apparatus applicable as a temporary or stationary observatory for temporary bridges, building and other purposes.	2969	22nd Oct. 1867	William Beale.
Improved modes of and means for curing, drying, preserving and packing meat, fruit, vegetables and other perishable substances. (*constructing the houses.*) (*Communicated by Daniel E. Somes.*)	3006	25th Oct. 1867	William Robert Lake.
Improvements in the construction of buildings, arches, bridges, coffer-dams, wharf walls and such like structures, and in the floors and roofs of buildings, and floors in other situations -	3080	2nd Nov. 1867	Samuel Parr. Alfred Strong.
Construction or arrangement of blocks of so-called workmen's dwellings.	3141	7th Nov. 1867	Edward Sephton.
Details and fittings of windows, doors and other similar contrivances applied to buildings and other structures - - - -	3206	12th Nov. 1867	James Carter. Thomas Chalmers.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
BUILDING, &c.—*continued.*			
Construction or arrangement of piles or fagots for wrought-iron beams, girders or bars of different forms. (*for building.*) (*Communicated by George Walters and Thomas Shaffer.*)	3355	27th Nov. 1867	John Henry Johnson.
Improvements in bedsteads, which improvements are also applicable to other purposes. (*scaffolding for building.*)	3383	28th Nov. 1867	Joseph Robinson Towers.
An improved brake-washer - - - (*for roofs.*) (*Communicated by Arthur Dillon-Corneck.*)	3399	30th Nov. 1867	William Edward Gedge.
Construction of metallic and other buildings -	3428	2nd Dec. 1867	Robert Porter.
Certain improvements in the manufacture of water-proof or liquid-proof paper or glazed paper or fabrics. (*for tents, covering walls, &c.*)	3437	3rd Dec. 1867	John Thorpe.
Step chairs, ladders and steps - - -	3460	5th Dec. 1867	Samuel Leake Worth.
Improvements in the manufacture of fire-bricks, tiles, and solid or hollow fire-lumps, and in the manufacture of retorts, pipes, crucibles or other hollow vessels or moulds required to resist a high degree of heat, and also in the manufacture of ornamental bricks, tiles, quarries, trusses, bosses, vases, busts, figures, columns, capitals, bases, cornices, copings, tablets, finials, and other articles of an ornamental character employed in building and in architectural decorations.	3501	9th Dec. 1867	Henry Bessemer.
Construction of fire-proof floors for buildings -	3605	19th Dec. 1867	Edward Taylor Bellhouse.
For ventilating buildings, *see* "VENTILATION." For warming buildings, *see* "HEATING." For lighting buildings, *see* "LAMPS."			
BUOYS, MARINE LIGHTS; PRESERVING LIFE AND PROPERTY AT SEA, CONVEYING LINES TO STRANDED VESSELS; SWIMMING, IMPARTING BUOYANCY.			
Construction of seats or chairs suitable for preserving life in case of shipwreck, and also for being used as bathing chairs.	78	11th Jan. 1867	Michael Hodge Simpson.
Improvements in constructing quays, jetties, piers, sea walls and breakwaters, in the formation of reservoirs, docks, basins, coast harbours, harbours of refuge, lighthouses and sea batteries, applicable also for the reclamation of land and for the building of bridges.	79	11th Jan. 1867	Henry Buss.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
Buoys, &c.—*continued.*			
Improved methods for developing powerful electrical currents and discharges, principally applicable to the production of lights at sea, and in apparatus for determining electrical resistances in connection with such and other currents. (*Partly communicated by Dr. Werner Siemens.*)	261	30th Jan. 1867	Charles William Siemens.
Floating lights or beacons - - -	312	4th Feb. 1867	The Right Honourable James Earl of Caithness.
Apparatus for raising stranded and sunken vessels -	441	18th Feb. 1867	Count Arthur Dillon.
Stoppers or means for stopping the ears - - (*for use in swimming.*) (*Communicated by Joseph Porter Michaels.*)	995	3rd April 1867	William Clark.
Improvements in apparatus to be used for towing ships or vessels, and in apparatus for laying submarine telegraph cables. (*or floating light vessels.*)	1015	4th April 1867	James Maze Kilner.
Life boats - - - - - - (*forming air chambers under the thwarts.*) (*Communicated by Albert Lintonner Shears and William Spencer Driggs.*)	1211	26th April 1867	Alexander Melville Clark.
An improved system of mechanical aids worked by hand or motive-power, for enabling the arts of swimming, floating and diving to be rapidly acquired.	1396	11th May 1867	James Reilly.
Improved means and apparatus for raising sunken vessels, which invention is also applicable for preventing vessels from foundering.	1778	18th June 1867	Joseph Marshall Frost.
Life buoys - - - - -	2019	10th July 1867	James Samuel Hood.
Framing of lighthouse lanterns and of the optical apparatus of lighthouses.	2054	12th July 1867	David Marr Henderson.
Improvements in an apparatus for preserving life in water, and propelling, floating or manœuvering in water any body, vessel or mechanical contrivance, and for floating or manœuvering in the air any mechanical contrivance.	2397	21st Aug. 1867	John Goucher.
Apparatus for submarine exploration - - (*Communicated by George Wrightson.*)	2466	29th Aug. 1867	Alexander Melville Clark.
Method of and materials for manufacturing ammunition boxes, pontoons, baggage and other waggons and carriages, and various equipments for military, navy and civil purposes. (*beacons and buoys.*)	2630	19th Sept. 1867	Thomas Charles Clarkson.
An apparatus for assisting swimming - -	2793	4th Oct. 1867	Alfred Ford.
An improved apparatus for saving lives and property in case of ship-wreck at sea - -	3001	25th Oct. 1867	Gregorio Russo. Claudio Alli Maccaroni.
Matches for lighting cigars and for other purposes - (*for lighting lamps in lighthouses.*)	3336	26th Nov. 1867	Robert Michael Letchford.
Apparatus for saving life from drowning - -	3556	14th Dec. 1867	Archibald McMurdo.

For life-boats, *see* "Ship-building."

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
BUTTONS, BUCKLES, STUDS, SLEEVE-LINKS AND OTHER DRESS FASTENINGS.			
An improved machine for manufacturing eyelets -	260	30th Jan. 1867	William Rodolphus Landfear.
Studs and buttons and their fastenings - -	384	11th Feb. 1867	Robert Thomas Thompson.
An improved process of preparing raw hide for the manufacture of various articles. (*buttons or buckles.*)	394	12th Feb. 1867	William Henry Towers.
A new and useful process whereby leather, wholly or partially tanned, or animal tissue of any nature, is made hard, semi-elastic and transparent. (*for making buttons, buckles, &c.*)	651	7th March 1867	William Henry Towers.
Decoration or ornamention of metals - - (*buckles, &c.*) (*Communicated by Charles Besançon.*)	932	29th March 1867	George Davies.
Buckles or similar fastenings for braces, belts, straps or bands.	1074	11th April 1867	Richard Couchman.
Improvements in buttons and in the attachment of buttons to garments and fabrics.	1214	26th April 1867	George Augustus Huddart.
An improved tongless buckle with continuous pressure - - - - - - -	1581	28th May 1867	Louis Hyacinthe Dethiou. Frédéric Beaubry.
Manufacture of a spring hook, catch or fastening -	1746	15th June 1867	Thomas Walker.
Buttons or fastenings for dress - - -	1929	2nd July 1867	Thomas Young.
An improved elastic strap for garments - - (*Communicated by Phineas Taylor Barnum.*)	1970	5th July 1867	Charles Denton Abel.
An improved metallic eye for laces - - - (*Communicated by Louis Christian Hoffmeister.*)	2024	10th July 1867	George Davies.
Button fastenings for attaching buttons or ornaments to garments.	2093	17th July 1867	Charles Maitland Tate.
Construction of studs, buttons, solitaire studs and the like.	2195	29th July 1867	John Henry Wyatt.
An eyelet and paper fastener combined - - (*Communicated by Edward Boynton.*)	2276	7th Aug. 1867	Charles McDermott.
A new or improved fastening particularly applicable for leggings and gaiters - -	2357	16th Aug. 1867	Hyman Frankenburg. Samuel Phillips.
Drawer suspenders and brace fastenings - -	3074	31st Oct. 1867	Frederick Tew.
Manufacture of certain descriptions of buckles -	3201	12th Nov. 1867	Thomas Evans.
Studs, stud-buttons and solitaires - - -	3569	14th Dec. 1867	Laurentius Andreas Waldemar Lund.
CALCULATING, TEACHING, GIVING ANSWERS TO QUESTIONS.			
An improved instrument for giving answers to selected questions.	435	16th Feb. 1867	James Parkes.
Apparatus for teaching alphabets and reading -	476	21st Feb. 1867	Bertram Mitford.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CALCULATING, &c.—*continued.*			
Reckoning, counting or calculating apparatus - (*Communicated by Charles Denis Labrousse.*)	1470	17th May 1867	Clinton Edgcumbe Brooman.
Machinery for polishing, grinding and edging slabs of marble, slate and other minerals. (*school slates.*) (*Communicated by Stinson Hagaman.*)	2572	11th Sept. 1867	Alexander Melville Clark.
Reckoning, counting or calculating apparatus - (*Communicated by Charles Denis Labrousse.*)	3117	5th Nov. 1867	Clinton Edgcumbe Brooman.
An abacus or apparatus for imparting instruction in arithmetic, and which apparatus may be advantageously employed in teaching reading.	3546	13th Dec. 1867	James Williams.
CAMPHOR.			
A new or improved process and apparatus for refining camphor. (*Communicated by Charles Emile Perret.*)	2816	7th Oct. 1867	Charles Denton Abel.
CANDLES, TAPERS AND WICKS.			
Improvements in and applicable to candles - -	39	7th Jan. 1867	Benjamin Biggs.
Improvements in ornamenting candles and in apparatus employed for that purpose - -	671	9th March 1867	Arthur Field. William Bryer Nation.
Obtaining increased light in the combustion of illuminating matters.	1628	1st June 1867	Anton Georg Schaeffer.
Improvements in machinery or apparatus for making candles by dipping, and in the self-feeding of the tallow vessel or mould thereof.	1689	8th June 1867	John Clements Ralston.
Manufacture of candles - - -	1836	24th June 1867	John Kingsford Field.
A new metallic zinc paint - - - - (*and alloys for lamp wicks.*)	1845	25th June 1867	James Webster.
Improved machinery for making tapers - - (*see* "MATCHES.")	1907	29th June 1867	Joseph James Lane.
Apparatus for producing or increasing the light or heat from carbonized atmospheric air, gas or gaseous mixtures, by the use of hydrocarbons, oils, spirits or other inflammable liquids or any mixture thereof. (*metallic wicks.*)	2045	12th July 1867	Frederick Wilkins.
Improvements in ornamenting candles and in apparatus or machinery employed for that purpose - - - - - -	2489	3rd Sept. 1867	Arthur Field. William Bryer Nation.
Means or apparatus employed for lighting gas and other jets or lamps, candles, cigars and other articles.	2531	7th Sept. 1867	James Joseph Hicks.
Improvements in the manufacture of candles and in moulds for the same - - -	2734	27th Sept. 1867	Frederick Meyer. William Wainwright, junr.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CANDLES, &c.—*continued.*			
Improvements in candles and in moulds for moulding the same.	2761	1st Oct. 1867	John Lyon Field.
A new or improved candle-dipping machine - -	3490	7th Dec. 1867	John Beatty.
Improvements in the manufacture of candles and in the moulds or apparatus employed therein.	3536	12th Dec. 1867	Henry Field.
CARDS, TABLETS AND CARD-CASES.			
Improved apparatus for containing advertising and address cards for public distribution.	7	1st Jan. 1867	Herbert William Hart.
Cases or receptacles for needles, pins, cards, stamps, photographs, cigars and other similar articles.	122	17th Jan. 1867	Richard Newhall.
Construction of boxes or apparatus to contain address cards for public distribution - -	226	28th Jan. 1867	Julius Edward Mellin. Clement Henry Ulbricht.
A new or improved apparatus for holding and presenting cards and other articles for distribution.	239	29th Jan. 1867	William Willmer Pocock.
Construction of boxes or apparatus to contain address cards for public distribution - -	1144	18th April 1867	Julius Edward Mellin. Clement Henry Ulbricht.
Cases and boxes for holding needles, pins and other articles. (*cards.*)	1260	1st May 1867	Reuben Young.
Manufacture of cards, tablets and other articles from which marks made with water colors, ink or pencil may be repeatedly erased by moisture, without injury to the surface.	1402	11th May 1867	Thomas Nelson.
A new or improved machine for bronzing - - (*cards, &c.*)	1788	19th June 1867	Louis Simon.
Mounts or holders for maps, tablets, prints, blinds and similar articles.	2615	17th Sept. 1867	Thomas Turner.
CARRIAGES, CABS, OMNIBUSES, WAGGONS, CARTS, TRUCKS, VELOCIPEDES; LOADING AND TIPPING CARTS, &c.			
Certain improvements in the manufacture of carriages, coaches and other vehicles.	17	3rd Jan. 1867	Joseph Cockshoot, junr.
Apparatus employed in coupling railway carriages to each other.	18	3rd Jan. 1867	William Chippindale.
Shot or ammunition lifters or holders and carriages for the same.	85	12th Jan. 1867	Henry Duncan Preston Cunningham.
An improved carriage lifting jack. (*Communicated by Noel Victor Dominique Barbou.*)	94	14th Jan. 1867	Alexander Horace Brandon.
Tramways and carriages for streets and ordinary roads.	232	29th Jan. 1867	John Haworth.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CARRIAGES, &c.—*continued.*			
Improvements in carriages or vehicles, and in securing or harnessing draught animals thereto.	388	12th Feb. 1867	William Stratford.
Wheels for carriages and other vehicles. (*connecting with axles.*) (*Communicated by John Raddin.*)	470	21st Feb. 1867	George Haseltine.
An improved means or apparatus to be used for travelling through the atmosphere and on land and water.	473	21st Feb. 1867	Joseph Meyers Kaufmann.
Improvements in railway engines and carriages, and in railways applicable for the purpose of locomotion on inclines, and also for retarding and stopping such engines and carriages. (*Communicated by Pierre Ambjorn, Comte de Sparre.*)	493	22nd Feb. 1867	Michael Henry.
Improved apparatus and mechanism to be used for awnings or coverings for omnibuses and other vehicles - - - - - -	503	23rd Feb. 1867	Henry James Cole. William Chisholm Horton.
Apparatus for the reception of monies paid as fares in omnibuses and other vehicles.	554	28th Feb. 1867	Robert Edwards Guy.
Machinery for conveying, screening and loading coke and other materials - - - -	620	6th March 1867	John Robert Breckon. Robert Dixon.
Carriages - - - - - -	622	6th March 1867	George Henry Morgan.
Apparatus for facilitating the starting of street or horse railroad and other carriages. (*Communicated by Samuel Ward.*)	670	8th March 1867	William Clark.
Means or apparatus for raising carriage heads -	784	19th March 1867	Edwin Harvie.
A new or improved safety carriage or vehicle, comprising an instantaneous unyoking or releasing apparatus, a break and apparatus connected therewith.	875	26th March 1867	Auguste Frédéric Langin.
Movable hoods for carriages and other vehicles -	945	30th March 1867	James Macnee.
An improved system of tank locomotive engine - (*connecting bogie carriages.*)	977	2nd April 1867	Jean Jacques Meyer. Adolphe Meyer, junr.
An improved machine for cutting scale-board, and for the manufacture of the scale-board or material cut by said machine into an improved fabric for structures generally. (*for cars, carriages, carts, &c.*) (*Communicated by John Kinney Mayo.*)	1051	8th April 1867	William Clark.
Improvements in the construction of railways and trucks to be employed thereon, specially for agricultural purposes.	1056	9th April 1867	Robert Alexander Rooney.
Apparatus for coupling railway carriages and vehicles - - - - - -	1110	13th April 1867	John Richardson. Charles Greenwood.
Improvements in ploughs and other agricultural implements, parts of which improvements are also applicable to wheeled carriages.	1130	16th April 1867	Robert Boby.
Velocipedes - - - - - -	1161	20th April 1867	William George Crossley.
Construction of tents by lacing instead of buttoning as heretofore, and transforming the same into ambulances to carry crippled and wounded men. (*Communicated by Alfred Varnier.*)	1209	26th April 1867	James Archibald.
Manufacture of wagons for collieries, railways and other similar purposes - - - -	1273	2nd May 1867	James Lomax. John Lomax.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CARRIAGES, &c.— *continued.*			
Improvements in wheeled carriages and in the construction of wheels and springs for such carriages and other vehicles - - - -	1441	15th May 1867	George Coles. James Archibald Jaques. John Americus Fanshawe.
A new indicator for carriages - - - (*see* "MEASURING PROGRESS.")	1505	21st May 1867	Marc Runkel.
Means and apparatus employed for conveying telegraphic dispatches, letters and other light articles through tubes. (*pneumatic tubes.*) (*Partly communicated by Dr. Werner Siemens.*)	1532	23rd May 1867	Charles William Siemens.
Covering buckles, saddle-trees, turrets, hooks and other metallic trimmings for carriages and harness, with a coating of vulcanized or hard rubber, gutta-percha or other gum.	1630	1st June 1867	Andrew Albright.
Wheel carriages and other vehicles - -	1681	7th June 1867	Joseph Offord.
Velocipedes or manumotive or pedomotive carriages.	1682	7th June 1867	William Tribe.
Improvements in securing and adjusting windows, blinds and shades, doors and shutters, and in the apparatus employed therefor. (*railway carriage windows.*)	1708	10th June 1867	Robert Logan.
A combined step cover and wheel fender for carriages and other vehicles. (*Communicated by John Wood Gosling.*)	1721	12th June 1867	John Millward.
Improvements in railway carriages and in brakes for the same. (*Communicated by Samuel Augustus Chase.*)	1764	17th June 1867	William Robert Lake.
Tenon cutting machines - - - - (*for railway carriage work.*)	1813	21st June 1867	John Powis. Jabus Stanley James.
An improved self-detaching coupling for railway carriages. (*Communicated by Ernest Von Jeinsen.*)	1879	27th June 1867	William Robert Lake.
Improvements in the manufacture of carriage bodies, and which said improvements are also applicable to the manufacture of pleasure and other boats, and other like purposes where great strength and lightness is of importance.	1903	29th June 1867	Henry John Cox.
Construction of wheeled vehicles - - -	1976	6th July 1867	William Richardson Gorst.
Improvements in the manufacture of clips or spring boxes for railway and other carriages, and in machinery or apparatus to be employed therein.	2061	13th July 1867	Jacob Walker.
Improvements in fire-escapes, the same being suitable for ascending and descending mines or other deep places, and at other times convertible into a piece of furniture, such as a couch, ottoman, chair, table or other similar article. (*or go-cart.*)	2069	13th July 1867	John Scott.
Manufacture of wheeled and other carriages or vehicles. (*Communicated by John Smalley Campbell.*)	2262	5th Aug. 1867	John Garrett Tongue.
Certain improvements in the manufacture and construction of cabs, coaches, carriages, omnibuses and other similar vehicles - -	2355	16th Aug. 1867	John Day. William Dorber.
Certain improvements in hoods or coverings for "perambulators," "bath chairs," carriages and other vehicles.	2362	17th Aug. 1867	Alexander Leveson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CARRIAGES, &c.—*continued.*			
Railway carriages - - - - -	2381	19th Aug. 1867	Clemens Reifert.
Apparatus for registering the number of passengers carried in omnibuses. (*Communicated by Louis Auguste Gille and François Beatry.*)	2392	21st Aug. 1867	William Thomas.
An improved mode of and apparatus for hauling draining and other agricultural implements in the field, by steam power, and also an improved truck for mounting and carrying such implements from place to place.	2426	24th Aug. 1867	John Phillips Smith.
Manufacture of carriages, coaches and other vehicles.	2532	7th Sept. 1867	Joseph Cockshoot, junior.
Method of and materials for manufacturing ammunition boxes, pontoons, baggage and other waggons and carriages, and various equipments for military, naval and civil purposes.	2630	19th Sept. 1867	Thomas Charles Clarkson.
Self-acting folding carriage steps - - -	2671	21st Sept. 1867	Thomas Kendrick.
Railway and other carriages and various parts of the same.	2796	4th Oct. 1867	Joseph Offord.
Improvements in mattresses, sofas, couches, ottomans, easy chairs, railway carriage seats and other such like or similar articles - -	2834	8th Oct. 1867	Robert Reid. Edward Horne Craigie.
Arrangement and construction of street sweeping and cleaning machines. (*constructing the carts.*)	2845	9th Oct. 1867	William Warren.
An improved mode of preparing iron for the manufacture of various articles where great strength and capability of resistance to tensile strain or torsion is required. (*for waggons, gun carriages, &c.*) (*Communicated by Michel Pawlowitch Lwoff.*)	2865	11th Oct. 1867	William Edward Newton.
Improvements in the construction of railways and railway carriages, and in the means for propelling the said carriages. (*Communicated by Charles Thompson Harvey.*)	2896	15th Oct. 1867	William Robert Lake.
Improvements in locomotive engines, vehicles and appendages thereto, for better and safer working on railways, tramways and common roads.	2907	17th Oct. 1867	William Bridges Adams.
Certain improvements in hoods or coverings for perambulators, bath chairs, carriages and other vehicles.	2910	17th Oct. 1867	Edward Shaw.
Chairs for the use of dentists, barbers, photographers or other persons, such invention also being applicable to other useful purposes.	2915	17th Oct. 1867	Otis Converse White.
Carriages - - - - - -	2993	24th Oct. 1867	Henry Ritchie.
An improved artificial compound chiefly designed for use as a substitute for india-rubber or caoutchouc. (*for car springs.*) (*Communicated by Austin Goodyear Day.*)	3108	4th Nov. 1867	William Robert Lake.
Improvements applicable to carriages for tramways or railways for streets or roads.	3144	7th Nov. 1867	Charles Herbert Bright.
Apparatus employed in coupling railway carriages -	3163	8th Nov. 1867	William Chippindale.
Improvements in omnibuses and similar vehicles, and in apparatus in connection therewith, part of which improvements are also applicable to railway and other carriages.	3178	11th Nov. 1867	William Thompson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CARRIAGES, &c.—*continued.*			
An improved apparatus for opening and closing the heads of landaus, barouches and other open carriages.	3203	12th Nov. 1867	Alexander M^c^Kenzie.
Covering buckles, saddle-trees, turrets, hooks and other metallic trimmings for carriages and harness, with a coating of vulcanized or hard rubber, gutta-percha or other gum. (*Communicated by Andrew Albright.*)	3258	16th Nov. 1867	William Robert Lake.
Certain improvements in the construction of waggons and other carriages employed on railways or tramways - - - - - -	3261	18th Nov. 1867	Law Brierley. Walter Brierley. John Bonnell.
Improvements in means of communication applied to railway carriages, and in apparatus for making signals, which improvements are in part applicable to other purposes.	3284	20th Nov. 1867	Hugh Hughes Lloyd.
Certain new and useful improvements in the running mechanism of car and carriage trucks of any nature.	3363	27th Nov. 1867	Samuel Augustus Chase.
Improved means of connecting and disconnecting locomotive engines and railway carriages and other vehicles. (*Communicated by Louis Joseph Lecocq.*)	3398	30th Nov. 1867	William Edward Gedge.
An improved brake-washer - - - (*for carriages.*) (*Communicated by Arthur Dillon-Corneck*).	3399	30th Nov. 1867	William Edward Gedge.
Couplings for railway wagons - - -	3407	30th Nov. 1867	Robert Fletcher Compton.
An improvement in the construction of easy chairs, settees, sofas, seats for railway and other carriages, and invalid hospital couches or carriages	3412	2nd Dec. 1867	Thomas Finer Widenham. John Reynolds.
Couplings for railway trucks - - -	3478	6th Dec. 1867	Jabez Evans.
Machinery for the manufacture of bricks and tiles (*wheelbarrows.*)	3534	12th Dec. 1867	Peter Bawden.
Certain improvements in the manufacture and construction of carriages, landaus and other similar vehicles.	3600	18th Dec. 1867	Joseph Cookshoot, junior.
Construction of and mode or modes of connecting and working railway carriages or trains -	3629	21st Dec. 1867	Charles de Bergue. William Dredge.
Improvements in machinery for pressing cotton and for crushing and pressing other substances, the said machinery being adaptable for locomotion on railways or on common roads.	3635	21st Dec. 1867	Charles George Wilson.
Improvements applicable to the rigging, chains, windlasses, anchors and other parts of ships or vessels, or to collieries, railways, rolling stock or other purposes, to prevent sudden blows, jerks or strains.	3637	21st Dec. 1867	James Davison.
Carriages, railway trucks and other vehicles -	3692	28th Dec. 1867	Richard Howarth.
See also "AXLES." *See also* "BREAKS." *See also* "WHEELS FOR CARRIAGES." For ventilating carriages, *see* "VENTILATION." For warming carriages, *see* "HEATING." For lighting carriages, *see* "LAMPS." For registers and turnstiles, *see* "MEASURING PROGRESS."			

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CARTRIDGES AND CASES.			
Cartridges - - - - - (*Communicated by Samuel Remington.*)	24	4th Jan. 1867	George Haseltine.
Waterproofing for encasing cartridges and other articles liable to injury by damp.	52	8th Jan. 1867	Eustace Carey Prentice.
Improvements in breech-loading fire-arms and in cartridges for breech-loading fire-arms.	89	14th Jan. 1867	Walter Sandell Mappin.
Improvements in fire-arms and ordnance, and in cartridges to be used therewith.	114	16th Jan. 1867	George Hookham.
Improvements in guns, projectiles and cartridges, and in the construction of the same.	189	25th Jan. 1867	George Clark.
Improvements in the construction, form and use and means of firing of projectiles, and in the construction and use and means of firing of ordnance and other arms. (*cartridges.*)	213	26th Jan. 1867	Thomas Berney.
Manufacture of cartridge cases - - - (*Communicated by Hippolyte Rochatte.*)	240	29th Jan. 1867	Clinton Edgcumbe Brooman.
An improved description of breech-loaded and needle-exploding fire-arms, and cartridge appropriate thereto.	251	30th Jan. 1867	Peter Ellis.
Improvements in breech-loading needle fire-arms, and in cartridges for the same. (*Communicated by Felix Allemano and Alberto Barelli.*)	445	19th Feb. 1867	George Frederick Redfern.
Improvements in breech-loading fire-arms, and in cartridges for the same. (*Communicated by Leon Lamblin, Christian Lenders and Toussaint Theate.*)	447	19th Feb. 1867	Henry Haschke.
Improvements in the construction of breech-loading fire-arms, and in the cartridges to be used therewith - - - - -	483	22nd Feb. 1867	Mowbray Walker. George Henry Money. Francis Little.
Central-fire cartridges - - -	519	26th Feb. 1867	James Syme.
Construction of cartridges for breech-loading fire-arms.	660	8th March 1867	George Henry Daw.
Improvements in breech-loading fire-arms and in cartridges for the same. (*Communicated by Emile d'Erlanger.*)	717	13th March 1867	Marc Antoine François Mennons.
Central-fire cartridges for breech-loading fire-arms. (*Communicated by Benjamin Stone Roberts.*)	805	20th March 1867	Marc Antoine François Mennons.
Central-fire cartridges - - - - (*Communicated by Jules Félix Gévelot.*)	820	21st March 1867	William Clark.
Breech-loading fire-arms and cartridges - - (*Communicated by Longhlin Conroy and Tristram Dodge Vanderveer.*)	866	25th March 1867	William Clark.
Improvements in breech-loading needle guns and in cartridges to be used therewith.	961	30th March 1867	Friedrich Hahn.
Breech-loading fire-arms and cartridges - -	963	30th March 1867	Joseph Whitworth.
Fire-arms and cartridges - - - -	972	1st April 1867	Joseph Lewis. George Clark.
Improvements in the preparation of explosive compounds and in making up cartridges or charges therewith.	989	2nd April 1867	John Fry Reeves.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CARTRIDGES, &c.—*continued.*			
Cartridges for breech-loading fire-arms - - (*Communicated by Alfred Pierre Tronchon.*)	1002	3rd April 1867	Eugène Delessert.
Improvements in breech-loading fire-arms and in cartridges for the same. (*Communicated by Jérome Hachat.*)	1023	5th April 1867	William Armand Gilbee.
Cartridges for breech-loading fire-arms - -	1117	13th April 1867	John Webster Cochran.
Improvements in breech-loading fire-arms, and in apparatus for closing and repriming cartridge cases for the same.	1138	17th April 1867	Thomas Horsley.
Improvements in breech-loading fire-arms, and likewise the cartridges and balls to be used therewith.	1143	18th April 1867	Edward Lindner.
An improved breech-loading needle rifle and improved cartridge. (*Communicated by Signor Francesco Glisenti.*)	1165	22nd April 1867	Cesar De Tivoli.
An improvement in cartridges for fire-arms and ordnance.	1173	23rd April 1867	John Plews.
Shot cartridges - - - - -	1216	26th April 1867	Lewis Budd Bruen.
Manufacture of cartridges for breech-loading arms (*Communicated by Alfred Isidoré Honore Parent.*)	1231	27th April 1867	Clinton Edgcumbe Brooman.
Apparatus for turning or closing central-fire sporting cartridges.	1381	9th May 1867	George Jeffries.
Cartridge holders more especially adapted for shooting coats and belts.	1413	13th May 1867	James Leetch.
A novel system of cartridge for Lefaucheux and other guns. (*Communicated by Joseph Audouy.*)	1484	18th May 1867	William Edward Gedge.
An improved central-fire metallic cartridge and apparatus for manufacturing the same. (*Communicated by Dexter Smith and Joseph Miller Hall.*)	1514	21st May 1867	Alfred Vincent Newton.
Breech-loading fire-arms and cartridges - -	1521	22nd May 1867	William Jeremiah Murphy.
Cartridges for breech-loading fire-arms - - (*Partly communicated by Charles François Galand.*)	1590	29th May 1867	Joseph Rock Cooper.
An improvement in breech-loading fire-arms and cartridges adapted to such arms.	1658	5th June 1867	Isaac Morris Milbank.
Improvements in the construction of breech-loading fire-arms, and in the manufacture and construction of cartridges for breech-loading fire-arms.	1664	6th June 1867	Thomas Wilson.
Improvements in guns, projectiles and cartridges, and in the construction of the same.	1757	15th June 1867	George Clark.
Projectiles and cartridges for ordnance and fire-arms	1806	20th June 1867	John Webster Cochran.
An improved solid cartridge case - - -	1835	24th June 1867	Edmund Leahy.
Improvements in breech-loading fire-arms and in the manufacture of cartridges to be used therewith.	1873	27th June 1867	Ernest Farrington.
Improvements in breech-loading fire-arms and in cartridges and projectiles, a part of which improvements is also applicable for converting muzzle-loading fire-arms into breech-loading fire-arms.	1971	5th July 1867	James MacNaughton.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CARTRIDGES, &c.—*continued.*			
An improved method of loading any number, description or size of cartridges used in breech-loading guns, with safety, rapidity and precision, and with any charge variable at pleasure.	2091	17th July 1867	Thomas Wyllie Riddell-Webster.
Cartridge pouches or carriers - - - (*Communicated by Clarence Blake.*)	2098	17th July 1867	George Henry Daw.
Manufacture of cartridge cases - - - (*Communicated by Hippolyte Rochatte.*)	2167	25th July 1867	Clinton Edgcumbe Brooman.
Improvements in breech-loading fire-arms and in cartridges - - - - -	2168	25th July 1867	Guillaume Laurent Barens. Jean Fructueux Ladougne.
Apparatus for charging and turning cartridges for breech-loading fire-arms.	2172	26th July 1867	George Barons Northcote, junior.
Cartridges and fire-arms - - - -	2277	7th Aug. 1867	Alexander John Paterson.
Means employed for rendering cartridges or cartridge cases for fire-arms waterproof.	2318	12th Aug. 1867	William Thomas Eley.
Apparatus for turning or closing cartridges for breech-loading fire-arms - - -	2369	17th Aug. 1867	James Willis Dixon, junr. William Buttery.
Cartridges for breech-loading fire-arms - -	2409	22nd Aug. 1867	Joseph Jones. Frederick James Jones.
Cartridges for breech-loading fire-arms - - (*Communicated by John Webster Cochran.*)	2431	24th Aug. 1867	William Robert Lake.
Improved apparatus to be used in the manufacture of ball cartridges.	2502	4th Sept. 1867	George William Howard.
An improved cartridge holder - - - (*Communicated by Charles Howlett, Charles Hobby Pond, Jacob Rutser Schuyler, Marcellus Hartley and Malcolm Graham.*)	2547	9th Sept. 1867	William Robert Lake.
Cartridges - - - - -	2550	9th Sept. 1867	George Clark.
A new or improved material to be used as a substitute for oiled silk, bladders, gut-skins, india-rubber, and other waterproof materials and leather.	2604	14th Sept. 1867	John Jeyes.
Method of and materials for manufacturing ammunition boxes, pontoons, baggage and other waggons and carriages, and various equipments for military, naval and civil purposes. (*cases for carrying cartridges; forming gun wads, &c.*)	2630	19th Sept. 1867	Thomas Charles Clarkson.
A new or improved cartridge for breech-loading fire-arms - - - - -	2654	21st Sept. 1867	Charles Edmond Green. John Green.
Improvements in fire-arms and ordnance, and in cartridges for the same and for other fire-arms and ordnance - - - -	2923	18th Oct. 1867	Henry William Garrett. George Holcroft.
Apparatus for charging and closing breech-loading cartridge cases - - - -	2958	21st Oct. 1867	Cecil Duncombe.
Magazines or reservoirs for containing explosive compounds or liquids and gunpowder. (*and cartridges.*)	2999	24th Oct. 1867	Edward Matthew Palliser.
Improvements in the treatment of gun cotton and charges or cartridges made therefrom, as also in the processes employed in their manufacture.	3127	6th Nov. 1867	Eustace Carey Prentice.
Cartridges for breech-loading fire-arms - - (*Communicated by John Webster Cochran.*)	3187	11th Nov. 1867	William Robert Lake.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CARTRIDGES, &c.—*continued.*			
Improvements in the construction of breech-loading fire-arms, and in the manufacture and construction of cartridges for breech-loading fire-arms.	3211	13th Nov. 1867	Thomas Wilson.
Breech-loading fire-arms and cartridges - -	3301	21st Nov. 1867	William Jeremiah Murphy.
An improved apparatus by which central-fire breech-loading fire-arms may be converted into muzzle-loaders at pleasure, and which also forms an indestructible cartridge case - -	3308	22nd Nov. 1867	John Wormald. William Bell Dalton.
Improvements in breech-loading fire-arms and in cartridges for the same. (*Communicated by La Société Industrielle Suisse.*)	3324	23rd Nov. 1867	John Henry Johnson.
Improvements in breech-loading fire-arms and in cartridges for the same. (*Communicated by Silvanus Frederic Van Choate.*)	3345	26th Nov. 1867	William Robert Lake.
An improved process for the reduction of tin so as to render it applicable for coating metals and for other purposes. (*for cartridge cases, percussion caps, &c.*) (*Communicated by Jules Fenquiéres.*)	3517	11th Dec. 1867	Alexander Melville Clark.
Fire-arms and cartridges - - -	3539	12th Dec. 1867	Westley Richards.
Improvements in guns, projectiles and cartridges, and in the construction of the same.	3562	14th Dec. 1867	George Clark.
Improved machinery for manufacturing central-fire cartridges.	3633	21st Dec. 1867	James Davidson.
Machinery for the manufacture of cartridge cases -	3636	21st Dec. 1867	Edwin Ludlow. Alfred Ludlow.
CASKS AND BARRELS; CASK-STANDS; BUNGS; TILTING CASKS.			
Improvements in manufacturing metallic hoops for casks or other wooden vessels or utensils, and in machinery therefor.	223	28th Jan. 1867	John Poole.
Apparatus for tilting barrels on any description of stillage. - - - - -	411	14th Feb. 1867	Joseph Walton. Robert Harlow.
Machinery for washing and cleansing casks -	496	23rd Feb. 1867	Thomas King.
Bushings for the bung-holes of casks and similar vessels.	648	7th March 1867	William Hurrell.
Improvements in decanting or drawing off wines, beer, spirits and other liquids, and in the apparatus employed therein. (*Communicated by Jean Gaudin.*)	921	29th March 1867	John Henry Johnson.
Improvements in the construction of bottles intended to contain malt liquors and other liquids, and in the mode of stoppering, unstoppering and drawing off the contents thereof, the said stoppers being also applicable to bottles of the ordinary kind and other vessels employed to contain liquids, fluids and gases, either separately or in combination. (*stoppers for barrels.*)	1033	6th April 1867	William Dennis.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
Casks, &c.— *continued.*			
An improved machine for cutting scale-board, and for the manufacture of the scale-board or material cut by said machine into an improved fabric for structures generally. (*barrels.*) (*Communicated by John Kinney Mayo.*)	1051	8th April 1867	William Clark.
Apparatus for storing and drawing off beer, wine and other materials.	1289	2nd May 1867	Charles Ritchie.
Improvements in casks and in apparatus for storing and drawing off liquids and semi-fluid matters.	1380	9th May 1867	Charles Ritchie.
Application of plastic and fibrous materials to the manufacture of moulded or formed articles. (*casks or their linings.*)	1700	10th June 1867	John Macintosh.
An improved method of adapting paper linings to the interior of casks, cases and packages of various descriptions.	1885	28th June 1867	Joseph Hélène Viton.
Appliances for filling into and drawing liquids from casks and other vessels, and for excluding the air from such vessels when empty.	1935	3rd July 1867	John McKibbin.
An improved stopper for bottles, jars, casks and other vessels - - - - -	2021	10th July 1867	Howard Busby Fox. James Turner Hall.
An hydraulic self-acting vent peg - - (*Communicated by Henry Clarke.*)	2067	13th July 1867	Edward Thomas Hughes.
An improved means of allowing the escape of superfluous carbon from casks of newly-made wine, cider, perry and other fermenting liquors.	2122	20th July 1867	Thomas Bromwich.
Machinery for washing bottles, casks and other vessels.	2135	22nd July 1867	John Walker.
An improved machine for cleaning barrels or casks	2345	15th Aug. 1867	Jonathan Peacock.
Cask stands - - - - -	2554	9th Sept. 1867	James Turnock.
Method of and materials for manufacturing ammunition boxes, pontoons, baggage and other waggons and carriages, and various equipments for military, naval and civil purposes. (*cases for carrying water.*)	2630	19th Sept. 1867	Thomas Charles Claskson.
Taps for beer casks and other vessels - -	2703	25th Sept. 1867	Alfred Rooker.
An improved device for bunging barrels or casks - (*Communicated by John Ruigg and Joseph Gambrill Marriott.*)	2850	10th Oct. 1867	William Robert Lake.
An improvement in the rolling of hoop or strip iron for brewers' or other hoops. (*for casks.*)	2866	11th Oct. 1867	William Butler.
Machinery or apparatus for cleansing casks - -	2906	17th Oct. 1867	James Oxley. George Wilson.
Improvements in stoppers for bottles, which improvements are also applicable to cocks for casks and other like receptacles - - -	2922	18th Oct. 1867	Francisco Prudencio. Frank Cooper. Joseph Francis Cotterell.
Bungs for casks, tuns or other similar vessels for containing liquids.	3204	12th Nov. 1867	Léos Antoine Badin.
Treating casks in order to render them impervious	3207	12th Nov. 1867	John Dillon Scally.
Cask stands - - - - -	3253	16th Nov. 1867	Frederick William Russll.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CASKS, &c.—*continued.*			
Metallic casks or vessels - - - -	3450	4th Dec. 1867	Robert Reid Gray.
Machinery for shaping cask headings and similar articles.	3497	9th Dec. 1867	William Clapperton.
Manufacture of metallic casks or vessels - -	3683	27th Dec. 1867	Andrew Dunn. Alexander Liddell.
CASTING AND MOULDING METALS; MANUFACTURE OF CASTINGS.			
Improvements in the means of and apparatus for lighting railway carriages, parts of which improvements are also applicable for other purposes. (*moulds for casting taps.*)	58	9th Jan. 1867	William Thomas Sugg.
An improvement in the manufacture of cast steel -	83	14th Jan. 1867	Robert Mushet.
Improvements in pipe moulding and casting apparatus, and in black washing the moulds. (*Communicated by George Ross.*)	99	14th Jan. 1867	William Clark.
Improvements in making moulds for casting fenders and in fitting bottoms to fenders, which improvements in making moulds for casting fenders may also be applied to the making of moulds for casting other articles - -	139	19th Jan. 1867	James Bate. George Asher.
Improvements in constructing and applying defensive armour and also bullet-proof porthole covers for the defence of ships and other vessels, forts, batteries and other fortifications, parts of which improvements are applicable to other purposes.	193	25th Jan. 1867	Thomas Berney.
Improvements in the manufacture of cores for the sockets for metal pipes, and in apparatus employed therein - - - - -	209	26th Jan. 1867	Matthew Hodgson Lishman. Edward Chambers.
An improved method of casting articles in iron and steel. (*Communicated by Nicolas Pootceloff.*)	244	29th Jan. 1867	William Edward Newton.
Manufacture of iron and steel - - - (*casting ingots.*)	546	27th Feb. 1867	Alexander Lyman Holley.
Construction of wheel moulding machines -	715	13th March 1867	Joseph Willcock. Samuel Mason, junr.
Core bars and studs to be used for casting iron pipes and similar articles.	813	21st March 1867	David Yoolow Stewart.
Improvements in the casting of Bessemer or crucible steel hoops for the tyres of railway wheels, such improvements being applicable for casting cylindrical forms in Bessemer or crucible steel for other purposes - - - - -	911	28th March 1867	David Foster. Rupert Cooke.
Improvements in fire-bars, and in the manufacture of the iron to be used in the construction thereof, the iron so manufactured being applicable also to other purposes.	1070	10th April 1867	William Colborne Cambridge.
Certain improvements in the means of casting or producing parts of steam, gas and water fittings, as also parts of lamps and other articles.	1355	8th May 1867	Charles Layton.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CASTING METALS, &c.—*continued.*			
Treating iron to obtain metallic compounds for various uses. (*for metallic castings.*)	1461	17th May 1867	Andrew Linmere Dowie.
Casting Bessemer metal, steel and other metals -	1606	30th May 1867	James Astbury.
Certain improvements in moulds to be employed in casting Bessemer steel and other metals -	1643	4th June 1867	Joseph Waddington. Benjamin Longbottom.
Manufacture of type for printing - - - (*Communicated by Eduard Heinrich Mayer.*)	1722	12th June 1867	John Frederick Boëtius. Jacob Eichhorn.
Manufacture of dies for stamping - - - (*casting.*)	1818	21st June 1867	William Price.
Certain improvements in casting ingots of Bessemer or other steel.	1833	24th June 1867	John Birch.
Manufacture of hollow vessels, and dished, sunken or tubular shapes or forms in metal or other material capable of being moulded - -	1851	25th June 1867	William Thomas Watts. Daniel Joseph Fleetwood.
Utilization of a certain waste material obtained in the manufacture of hydrocarbon liquids. (*for lining moulds.*)	1888	28th June 1867	John Carrington Sellars.
Casting of hollow and other fire-bars - -	2042	12th July 1867	James Nelson.
Casting of ingots - - - - -	2161	25th July 1867	Alexander Wilson.
Manufacture of cast steel and its derivatives - (*see* "METALS-SMELTING.") (*Communicated by Emile Martin and Pierre Emile Martin.*)	2166	25th July 1867	Clinton Edgcumbe Brooman.
Manufacture and treatment of certain kinds of iron	2185	27th July 1867	John Wood.
Treating cast iron - - - -	2282	7th Aug. 1867	Erasmus Thomas Horsley.
Apparatus for preparing moulds for the casting of pipes, cylinders, pillars, rollers and other forms	2286	8th Aug. 1867	Charles Benson. Joseph Barker.
Improvements in the construction of moulds for casting aluminium and other metal plates for artificial teeth, also in the method of casting said plates and securing the teeth therein, and in apparatus connected therewith, part of which improvements is applicable for producing other fine metal castings. (*Communicated by James Baxter Bean.*)	2368	17th Aug. 1867	Alexander Melville Clark.
Manufacture of iron and steel - - - (*Communicated by Alexander Lyman Holley.*)	2438	27th Aug. 1867	George Haseltine.
Improvements in the manufacture of malleable iron, cast iron and steel, and in the construction of furnaces to be employed for such purposes.	2484	2nd Sept. 1867	Charles Gelstharp.
A new or improved metal-founders' blacking -	2505	4th Sept. 1867	Frederick Hope Pattison, James William Henry Pattison.
Construction of cores used in casting metallic pipes or tubes of a curved or cyphon form	2601	14th Sept. 1867	Joshua Antill. George Grimes. Henry Charles Tunks.
Manufacture of moulders' blackening - -	2711	26th Sept. 1867	Robert Wilson Bennie.
Production of a glazed or vitrified surface on cast iron or other cast metal - - -	2717	26th Sept. 1867	Erasmus Thomas Horsley. Charles Horsley.
Machinery or apparatus for moulding metal -	2813	7th Oct. 1867	Joseph Smith.
Manufacture and refining of iron and steel - -	2832	8th Oct. 1867	John Player.
Improvements in casting metals, glass and other materials, and in apparatus employed for this purpose.	2912	17th Oct. 1867	Jacques Rives.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CASTING METALS, &c.—*continued.*			
Manufacture of smiths' anvils - - -	2924	18th Oct. 1867	Henry Sharp. Francis William Webb.
Improvements in ceiling cornices and centres, and other indoor ornaments of a similar nature, and in the mode of fixing the same.	2938	19th Oct. 1867	Francis William Waide.
Steam governors and valves - - - - (*Communicated by Francis Johnston Nutz, Philip Estes De Forrest Fairchild and Edward Payson Willson.*)	2980	23rd Oct. 1867	Alexander Melville Clark.
Making moulds for the manufacture of metallic screws.	3038	28th Oct. 1867	William Potts.
Certain improvements in the method of casting, forming or producing toothed wheels or gearing to be employed in machinery for preparing, spinning and twisting cotton or other fibrous substances - - - - - -	3063	31st Oct. 1867	William Hall. John Wren. James Brandwood.
Improvements in or applicable to that apparatus known as "Giffard's injector" and in the method of and machinery or tools for making the same. (*casting nozzles.*)	3169	9th Nov. 1867	James Gresham.
Manufacture of wheels for railway carriages and other rolling stock.	3274	19th Nov. 1867	Edward Reynolds.
Machinery for producing seamless tubes - - (*Communicated by William Forman Brooks.*)	3333	25th Nov. 1867	Thomas Chalmers.
Improvements in the manufacture of cutting tools and in the construction of tool holders.	3339	26th Nov. 1867	John Paterson Smith.
Permanent way of railways - - -	3362	27th Nov. 1867	James McFarlane. George Barker.
Certain improvements in moulds for casting Bessemer steel and other metals.	3400	30th Nov. 1867	Richard McClure.
An improvement in the manufacture of bells -	3416	2nd Dec. 1867	Charles Hargrove. Samuel Hargrove, junior.
An improved material or composition to be employed for covering or coating the interior surfaces of moulds, crucibles or ducts, previous to their receiving the molten metal in the process of casting and for other purposes.	3473	6th Dec. 1867	James Durrans.
Improvements in ordnance and in projectiles used therewith, as also in the processes employed in their manufacture.	3507	10th Dec. 1867	William Palliser.
Presses for stamping or endorsing - - (*moulding the type wheels.*) (*Communicated by Edouard Cornelis.*)	3516	11th Dec. 1867	Alexander Melville Clark.
Improvements in moulding and in the machinery or apparatus employed therefor - -	3585	17th Dec. 1867	William Simons. Archibald Carmichael.
An improved method of and apparatus for the manufacture of tinned leaden pipes. (*Communicated by Augustin Henry Hamon.*)	3591	17th Dec. 1867	William Edward Newton.
Moulds or apparatus to be used in casting steel -	3677	27th Dec. 1867	John Martin Rowan.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
Casting and Moulding Plastic Materials; Manufacture of Moulded Articles; Plastic Compositions; Moulding Fuel.			
An improved mould for making cigarettes -	25	4th Jan. 1867	John Wilkins.
Manufacture of artificial fuel - - -	32	4th Jan. 1867	James Bird.
Improvements in the construction of apparatus for mixing, pressing and moulding coal and other substances for the formation of artificial fuel, and dividing the same into blocks, such apparatus being also applicable to other analogous operations.	123	17th Jan. 1867	David Barker.
Improvements in hats and other coverings for the head, and their bodies or foundations or in similar articles, and in the means and appliances for producing the same - - - -	247	30th Jan. 1867	John Harcourt Brown. William Bull.
Utilizing a certain description of clay and a substance usually found therewith. (*see* " Bricks.")	551	27th Feb. 1867	Alexander McDougall.
An improvement in packing and preserving animal size.	607	5th March 1867	John Cowdery Martin.
Manufacture of porcelain - - - - (*Communicated by Waldron Joseph Cheyney.*)	642	7th March 1867	William Edward Newton.
An improved casing for protecting bottles or other similar articles, also an improved arrangement of machinery or apparatus for manufacturing such casing - - - - - (*moulded from felted materials.*)	797	19th March 1867	William McAdam. Sigismund Schuman.
Certain improvements in fire bars to be employed in furnaces, (*of fire clay in moulds.*)	906	28th March 1867	John Grundy.
Improvements in the manufacture of manure and in apparatus for the same. (*Communicated by Jean Georges Lucien Renard.*)	933	29th March 1867	William Clark.
Manufacture of artificial fuel - - -	935	29th March 1867	James Bird. James Bird.
Machinery for the manufacture of hats or coverings for the head.	942	30th March 1867	Joseph Edwin Ward.
Apparatus for the manufacture of bricks, tiles and other articles of plastic material. (*moulding fuel.*) (*Communicated by Frederick Hertel.*)	954	30th March 1867	William Clark.
Improvements in the treatment of peat and in the manufacture of peat charcoal, and in the machinery or apparatus employed therein. (*portable apparatus for moulding.*) (*Communicated by Augustus Figge.*)	1190	24th April 1867	John Henry Johnson.
Brick-making machines - - - - (*and moulding peat, &c.*) (*Communicated by John Scott Meredith and John Hanson Mitchell.*)	1393	10th May 1867	William Clark.
An improved method of producing mosaic veneers (*of plastic materials.*) (*Communicated by the American Mosaic Veneering Company.*)	1598	29th May 1867	Alfred Vincent Newton.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CASTING PLASTIC, &c.—*continued.*			
Application of plastic and fibrous materials to the manufacture of moulded or formed articles.	1700	10th June 1867	John Macintosh.
An improved combination of materials to be used in the manufacture of "drain bottoms," flue slabs, bricks and other like purposes.	1732	13th June 1867	John Holmes.
Apparatus for moulding artificial fuel - -	1830	22nd June 1867	Sydney Hall. William Henry Parsons.
Improvements in the manufacture of carriage bodies, and which said improvements are also applicable to the manufacture of pleasure and other boats, and other like purposes where great strength and lightness is of importance. (*moulding from pulp.*)	1903	29th June 1867	Henry John Cox.
An improved method of treating glass in order to produce tablets and other articles.	1914	29th June 1867	George Rees.
A process of uniting or cementing and compressing sawdust, shavings and other small particles of wood, for the purpose of converting the same into charcoal, and utilizing the naphtha, tar and other residuary products of such conversion.	1983	6th July 1867	William Harris.
Improved machinery for making bricks for building and other purposes, and of coal, peat or other substances to be used as fuel.	2028	10th July 1867	George Roughton Bromage Amott.
An improved compound to be used for igniting fires.	2055	12th July 1867	Adolphus Edward Herrmann.
A new or improved method of hardening plaster, plaster castings and the like.	2131	22nd July 1867	Bartholomew Philip Franzoni.
Improvements in the means of moulding subjects or designs in glass or crystal for ornamenting them inwardly, and improved tools or apparatus in connection therewith - - - -	2257	5th Aug. 1867	Léon Victor Hue. Charles Roziére.
The manufacture of artificial or compressed fuel in the treatment of coal, peat, charcoal, tan, sawdust and woody fibre, whereby those substances, either together or separately, can be utilized when in a state of powder or minute division, and converted into a serviceable fuel.	2577	11th Sept. 1867	Henry Richard Lückes.
Method of and materials for manufacturing ammunition boxes, pontoons, baggage and other waggons and carriages, and various equipments for military, naval and civil purposes. (*moulds for cannon wads.*)	2630	19th Sept. 1867	Thomas Charles Clarkson.
Improvements in the manufacture of candles and in moulds for the same - - - -	2734	27th Sept. 1867	Frederick Meyer. William Wainwright, jun^{r}.
Manufacture of hats and machines for producing the same.	2742	28th Sept. 1867	Henry Killogg.
Improvements in candles and in moulds for moulding the same.	2761	1st Oct. 1867	John Lyon Field.
Manufacture of grindstones and other blocks or forms of artificial stone - - - - (*moulding.*)	3193	11th Nov. 1867	Frederick Ransome. Henry Bessemer. Ernest Leslie Ransome.
New and useful machinery for making, drying and burning bricks and tiles, applicable in part to baking pottery ware.	3220	13th Nov. 1867	Peter Edward Bland.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CASTING PLASTIC, &c.—*continued.*			
Improvements in the manufacture of fire lighters, applicable also for temporary fires or heaters, and in the means or apparatus employed therein.	3244	15th Nov. 1867	James Templeman.
Merchants' ships and other vessels and appliances connected therewith. (*moulding fuel.*)	3331	25th Nov. 1867	George Bell Galloway.
Improvements in the manufacture of hats and bonnets, and in the apparatus employed therein.	3513	11th Dec. 1867	Henry Giles.
See also "BOTTLES." *See also* "BRICKS." *See also* "EARTHENWARE." For moulding sugar, *see* "SUGAR."			
CEMENT AND PLASTER; BURNING LIME.			
Improvements in the mode of and apparatus for manufacturing beton, and in the method of applying beton for certain constructive or structural purposes. (*Communicated by François Coignet.*)	77	11th Jan. 1867	Michael Henry.
Lime kilns - - - - - -	259	30th Jan. 1867	William Lee.
Construction and arrangement of kilns and ovens - (*for lime.*)	290	2nd Feb. 1867	John Gilbert Robinson.
Improvements in burning or calcining limestone and cement, and in ovens or apparatus employed for that purpose - - - - -	471	21st Feb. 1867	Henry Wadkin. Charles Shepherd.
Improvements in the preparation and application of isolating compositions for the protection of metallic surfaces from oxidation, and for the preservation of wood and other materials, and in the preparation of the residue of vegetable oils to be employed for such purposes. (*forming cements and hydraulic mastics.*)	814	21st March 1867	Giacomo Eduardo Marchisio.
Compositions to be applied as coatings to preserve the surfaces of metals, wood, stone and all such like materials.	1113	13th April 1867	Robert Alexander.
Kilns for burning limestone, cement and other materials.	1445	16th May 1867	Philip Arthur De Berenger.
Kilns or furnaces particularly applicable for burning plaster of Paris. (*Communicated by Paul Louis Daviau.*)	1537	23rd May 1867	Clinton Edgcumbe Brooman.
A new metallic zinc paint - - - (*or cement.*)	1845	25th June 1867	James Webster.
Improvements in the treatment and application of the residuum which results from the clarification and purification of cotton seed oil and other vegetable drying oils, and of the residuum which results from the distillation or other analogous treatment of the said material, for the manufacture and preparation of isolating preservative and anti-corrosive compositions. (*forming cements or mastics.*)	2656	21st Sept. 1867	Giacomo Eduardo Marchisio.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CEMENT, &c.— *continued.*			
Improvements in and applicable to ovens, boilers and other apparatus in which heat is employed. (*apparatus for calcining plaster of Paris.*) (*Communicated by Alfred Charles Joly de Marval.*)	2780	3rd Oct. 1867	William Spence.
Treatment of gutta-percha, indian-rubber, Honduras gum, and the other allied gums, for the production of a preparation or preparations applicable as a varnish, cement, paint, stain, water and air proof material, solid or elastic material and for other purposes. (*Communicated by Daniel Reed.*)	3542	13th Dec. 1867	Edward Reed Sintzenich.
CEMENTED AND FLOCKED FABRICS; ADHERING ORNAMENTS AND DEPOSITING METAL ON FABRICS OR YARNS.			
Improvements in the manufacture of boots and shoes, and in machinery or apparatus therefor, which improvements are also equally applicable to the manufacture of "portemonnaies," travelling bags, parts of harness, and in fact to almost all such manufactures as require fixing, basting, cementing, sewing or stitching. (*Communicated by Jules Constant Touzet.*)	206	26th Jan. 1867	Bristow Hunt.
A new method of manufacturing and applying artificial pearls or beads. (*Communicated by Emmanuel Meyer.*)	331	6th Feb. 1867	Clinton Edgcumbe Brooman.
An improved fabric in imitation of the skins of animals, suitable for the manufacture of ladies' mantles, carriage rugs and other articles. (*inserting tufts.*)	356	8th Feb. 1867	Edwin Firth.
A new or improved method of working or producing designs in wool. (*see* "SEWING.")	481	21st Feb. 1867	Louisa Hartland Mahon.
An improvement in ornamenting collars, shirt fronts and wristbands. (*adhering designs.*)	612	5th March 1867	John Edward Smith.
A new method of bronzing metallic and other surfaces - - - - - -	979	2nd April 1867	Joseph Storey. William Edward Bickerdike. William Virgo Wilson.
Ornamenting surfaces of paper, woven fabric and other material, to render them suitable for bookbinding and other similar uses. (*applying bronze powders, &c.*)	1695	8th June 1867	Alexander Parkes.
Improved means of applying and fixing metals on fabrics, feathers, artificial flowers and other articles. (*Communicated by George Henri Beraud and Pierre Dugué.*)	1913	29th June 1867	Clinton Edgcumbe Brooman.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CEMENTED FABRICS, &c.—*continued.*			
An improved mode or improved means of coloring or ornamenting fabrics and other surfaces, and of preparing printing surfaces. (*Communicated by Charles Depoully.*)	2378	19th Aug. 1867	Clinton Edgcumbe Brooman.
Fringes - - - - -	2560	10th Sept. 1867	John Holliday.
Improvements in carpet linings and in machinery for manufacturing the same. (*applying cement.*) (*Communicated by George Washington Chipman.*)	3005	25th Oct. 1867	William Robert Lake.
Certain improvements in printing or producing patterns or designs on woven fabrics. (*applying metals.*) (*Communicated by P. Duguait Dubourg.*)	3160	8th Nov. 1867	Paul Hardy Nathan.
Improvements in the manufacture of elastic fabrics, part of which invention is especially applicable to the production of shaped slipper fronts and similar articles.	3173	9th Nov. 1867	Caleb Bedells.
Ornamenting lace and other textile fabrics - - (*adhering ornaments.*)	3452	4th Dec. 1867	Francis Bryan Baker. Leonard Lindley.
Improvements in the preparation of floss silk and in the manufacture of ruches.	3715	31st Dec. 1867	Charles Grey Hill.
CHAINS; CHAIN CABLES; HOOKS, HOOPS, RINGS.			
Cotton bale ties - - - - - (*Communicated by John Cooper Lee.*)	175	23rd Jan. 1867	William Edward Newton.
Improvements in manufacturing metallic hoops for casks or other wooden vessels or utensils, and in machinery therefor.	223	28th Jan. 1867	John Poole.
Machinery and apparatus for supporting, moving and forging heavy masses of metal. (*hoops.*)	342	7th Feb. 1867	John Ramsbottom.
Treating vegetable substances chiefly applicable to the manufacture of paper pulp and fibres. (*for making hoops.*) (*Communicated by Benjamin Chew Tilghman.*)	385	11th Feb. 1867	William Edward Newton.
Uniting iron and steel in sheets, plates, rails, bars, rods, links, bands, hoops, tubes or other forms, applicable to navigable vessels, forts, bridges, roofs, floors, tanks or chests. (*links of chains and cables.*)	469	21st Feb. 1867	William Bridges Adams.
Manufacture of chains and fastenings - -	528	26th Feb. 1867	John George Taylor.
A compound safety disengaging hook - - (*see* "MINING.")	573	1st March 1867	Jubal Charlton Broadbent.
An improved construction of bale tie or fastening - (*Communicated by Osborne Macdaniel.*)	751	15th March 1867	Alfred Vincent Newton.
Improvements in metal ties or bands for securing bales of cotton or other substance, and in machinery employed in the manufacture of the same.	858	25th March 1867	Henry Fassmann.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CHAINS, &c.—*continued.*			
An improved machine for painting metallic surfaces, more especially designed for painting bands or hoops.	894	27th March 1867	Henry Fassmann.
Metal ties or bands for securing bales of cotton, wool and other substance.	1162	20th April 1867	Henry Fassmann.
An improved method of and apparatus for galvanizing or tinning and zinking iron wire and other description of iron. (*hoop iron.*) (*Communicated by Emile Delacroix.*)	1169	22nd April 1867	William Edward Gedge.
An improved self-acting tackle hook - - (*Communicated by Charles Luxton.*)	1202	25th April 1867	Alexander Melville Clark.
Rolling hoop iron - - - - -	1249	30th April 1867	Eli Deeley.
Machinery or apparatus for bending or forming wooden hoops.	1341	7th May 1867	Edmond Faucher.
An improved fastening for bands or hoops for baling cotton or other substances. (*Communicated by George Newton Beard.*)	1358	8th May 1867	William Robert Lake.
Improvements in steam rollers for rolling roads, and in pitch chains for working the same and for other purposes.	1500	20th May 1867	David Thomson.
Manufacture of ornamental chains and bands -	1622	31st May 1867	James Lancelott.
Spring hooks - - - - (*Partly communicated by Samuel Lagwitz.*)	1657	5th June 1867	Isaac Evans.
Manufacture of chains, bracelets, necklaces, and other similar articles of jewelry.	1731	13th June 1867	Auguste Cahen Lion.
Manufacture of a spring hook, catch or fastening -	1746	15th June 1867	Thomas Walker.
Swivels for fishing tackle and for other purposes -	1765	17th June 1867	Joseph Welch.
Metal ties or bands for securing bales of cotton or other substance. (*Communicated by Richard G. Latting.*)	1880	27th June 1867	William Robert Lake.
Hoop iron fastenings for bales - - - (*Communicated by Edmund Drinkwater Carver and George Ashcroft.*)	1972	5th July 1867	Henry Clifton Carver.
Shackles or joining links - - - -	2301	10th Aug. 1867	Edward Newby.
Uniting and treating iron, steel and other metals in sheets, plates, rails, bars, rods, links, bands, hoops, tubes or other formes, applicable to navigable vessels, forts, guns, bridges, roofs, floors, boilers, heaters, tanks, chests or like structures.	2376	19th Aug. 1867	William Bridges Adams.
Machines for manufacturing chains, cords, ropes, and the manner of making such chains, cords and ropes.	2492	3rd Sept. 1867	Achille Edward Gelhaye.
Stoppers or controllers for ships' cables - -	2545	9th Sept. 1867	Andrew Paul.
Machinery for rolling hoops, strips, angle bars and other bars of iron and steel.	2588	12th Sept. 1867	William Brown.
An improved mode of preparing iron for the manufacture of various articles where great strength and capability of resistance to tensile strain or torsion is required. (*for chains.*) (*Communicated by Michel Pawlowitch Lwoff.*)	2865	11th Oct. 1867	William Edward Newton.
An improvement in the rolling of hoop or strip iron for brewers' or other hoops.	2866	11th Oct. 1867	William Butler.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CHAINS, &c.—*continued.*			
Manufacturing iron and steel chains without welding - - - - - -	3515	11th Dec. 1867	Alphonse Camme. Ferdinand Delpech.
Improvements applicable to the rigging, chains, windlasses, anchors and other parts of ships or vessels, or to collieries, railways, rolling stock or other purposes, to prevent sudden blows, jerks or strains.	3637	21st Dec. 1867	James Davison.
Moulds or apparatus to be used in casting steel (*hoops.*) -	3677	27th Dec. 1867	John Martin Rowan.
CHARCOAL, COKE, CARBON, MOULDERS' BLACKING, LAMP-BLACK.			
Machinery for conveying, screening and loading coke and other materials - - - -	620	6th March 1867	John Robert Breckon. Robert Dixon.
Improvements in machinery or apparatus for the manufacture and reburning of animal charcoal, and for distilling shale and other like substances.	707	12th March 1867	John Frederick Brinjes.
Construction of retorts for reburning animal charcoal.	738	14th March 1867	Paul Thomas Goodwin.
Apparatus for driving revolving retorts and cylinders. (*for reburning animal charcoal.*)	802	20th March 1867	Paul Thomas Goodwin.
Improvements in the manufacture of colours and the extraction of colouring and dyeing matters from coal oil, shale oil or coal tar combined with peat or turf, and for a combination of any of these substances, and also for the utilization of the residue for the purpose of what is known as moulders' blacking, after the colouring and dyeing matters have been extracted - - -	1151	20th April 1867	Thomas Vincent Lee. Charles Edmund Lankester.
Improvements in the treatment of peat and in the manufacture of peat charcoal, and in the machinery or apparatus employed therein. (*Communicated by Augustus Higge.*)	1190	24th April 1867	John Henry Johnson.
Means and apparatus for effecting the revivification of animal and vegetable charcoal.	1415	13th May 1867	William Cormack.
Improvements in the treatment of animal charcoal and in the apparatus employed therein - -	1512	21st May 1867	John Stenhouse. James Duncan.
Machinery or apparatus for separating liquids or moisture from substances, and also for revivifying and cooling animal charcoal and other substances, and for treating sugar.	1605	30th May 1867	William Orr.
Construction of retorts for manufacturing and reburning animal charcoal.	1718	11th June 1867	John Fletcher.
An improved method of and apparatus for making sulphuret of carbon.	1886	28th June 1867	Charles Otto Heyl.
An improved method of and apparatus for extracting fatty matters from and for scouring wool and other fibrous substances and textile fabrics, by the use of sulphuret of carbon, and for regaining the sulphuret used in such operation.	1887	28th June 1867	Charles Otto Heyl.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CHARCOAL, &c.—*continued.*			
Improved means of and apparatus for washing and drying moist substances, or drying and burning granular substances, or evaporating liquid substances, and for economizing the waste heat produced in such processes. (*charcoal.*)	1930	2nd July 1867	George Gordon.
A process of uniting or cementing and compressing sawdust, shavings and other small particles of wood, for the purpose of converting the same into charcoal, and utilizing the naphtha, tar and other residuary products of such conversion.	1983	6th July 1867	William Harris.
Manufacture of coke - - -	2152	24th July 1867	Henry Aitken.
Treatment of seaweed for obtaining valuable products from it.	2436	26th Aug. 1867	Edward Sonstadt.
A new or improved metal-founders' blacking -	2505	4th Sept. 1867	Frederick Hope Pattison. James William Henry Pattison.
Revivifying animal charcoal - - -	2680	23rd Sept. 1867	James Blair.
Manufacture of moulders' blackening - -	2711	26th Sept. 1867	Robert Wilson Bennie.
Application of cannel coal "slack" to the manufacture of gas and coke.	3032	28th Oct. 1867	John Young.
CHENILLE.			
Machinery for manufacturing "chenille" - -	2590	13th Sept. 1867	Pierre Raymond Couchoud.
CHEQUES, BILLS AND RECEIPTS.			
Improved means of producing designs upon paper (*for bank notes, cheques, &c.*)	947	30th March 1867	Walter Bentley Woodbury. Robert Howe Ashton.
Machinery for printing consecutive numbers - (*cheques.*)	2084	16th July 1867	James Fraser.
Indication of value on cheques, bills of exchange and other documents.	2719	26th Sept. 1867	John Jameson.
Counter-check books - - -	3096	4th Nov. 1867	James Fraser. George Duncan.
Improved combined machinery for printing - (*bankers' cheques, &c.*)	3387	29th Nov. 1867	James Fraser. George Duncan.
An improved means to be employed for effecting the safe transmission of money or money orders, also improvements in the formation of documents that have to be separated.	3464	5th Dec. 1867	James Gibson Scott.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CHLORINE AND CHLORIDES.			
Improvements in the manufacture of chlorine, and in the production of artificial oxides of manganese for employment both in that and other manufactures.	133	18th Jan. 1867	Walter Weldon.
An improved method of manufacturing chlorine -	134	18th Jan. 1867	Walter Weldon.
Treatment of ores of lead for the purpose of obtaining salts and colours of the same - -	325	6th Feb. 1867	James Wright. Thomas Cobley.
Improvements in and apparatus for the manufacture of chloride of lime.	728	13th March 1867	Benjamin Platt.
Improvements in separating zinc from certain ores or minerals, and in recovering other substances found therewith. (*oxichloride of lead.*)	997	3rd April 1867	Peter Spence.
Manufacture of chlorine - - -	1054	8th April 1867	Carl Friedrich Claus.
An improved mode of producing chloride or oxychloride of lead, and treating the same for manufacturing white lead. (*Communicated by Thomas Mara Fell and Ambrose George Fell.*)	1465	17th May 1867	William Robert Lake.
Improvements in the production of artificial oxides of manganese, and in the manufacture of chlorine by means thereof, partly applicable also to other purposes.	2501	4th Sept. 1867	Walter Weldon.
Obtaining chlorine, sodium, potassium, phosphorus, and their compounds.	2801	5th Oct. 1867	James Anderson.
Preparing and oxidizing certain substances capable of producing chlorine.	3132	6th Nov. 1867	Isham Baggs.
Improvements in decomposing the sulphides of copper, silver, nickel, cobalt, lead, barium, strontium and calcium, and in obtaining copper, sulphur and other products. (*obtaining chlorides.*)	3232	14th Nov. 1867	John Clark. Alexander Esilman.
CHURNS, MILK CANS, MAKING CHEESE AND BUTTER.			
Manufacture of butter - - - -	218	26th Jan. 1867	Edward Henry Cradock Monckton.
Construction of machines for washing and churning.	360	8th Feb. 1867	Thomas Sibley.
An improved mixing apparatus, also applicable to beating eggs and to other similar purposes.	637	7th March 1867	Alfred Giles.
An improved machine for cutting scale-board, and for the manufacture of the scale-board or material cut by said machine into an improved fabric for structures generally. (*for cheese boxes.*) (*Communicated by John Kinney Mayo.*)	1051	8th April 1867	William Clark.
Cases for packing and transporting butter and other dairy produce.	1546	24th May 1867	Louisa Slatter.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CHURNS, &c.—*continued.*			
Churns - - - - - - (*Communicated by William Hookes Tambling.*)	1863	26th June 1867	William Robert Lake.
Improvements in the mode of preserving butter and substances of a similar nature, and in the apparatus or means employed therein. (*Communicated by Adolphe Hiullard.*)	1942	3rd July 1867	John Henry Johnson.
Milk cans - - - - - -	2495	3rd Sept. 1867	Louis Napoleon Le Gras.
Construction of churns - - -	2940	19th Oct. 1867	William Liebermann.
Churns - - - - - -	3560	14th Dec. 1867	Robert Tinkler.
Improvements in breaks for railway and other carriages, and in signalling and other apparatus in connection therewith, which improvements are also partly applicable to other purposes. (*to rotary churns.*)	3597	18th Dec. 1867	Thomas Comfield the younger.
CISTERNS, RESERVOIRS, TANKS AND BUCKETS.			
Improvements in the mode of and apparatus for manufacturing beton, and in the method of applying beton for certain constructive or structural purposes. (*for tanks and reservoirs.*) (*Communicated by François Coignet.*)	77	11th Jan. 1867	Michael Henry.
Improvements in constructing quays, jetties, piers, sea walls and breakwaters, in the formation of reservoirs, dock basins, coast harbours, harbours of refuge, lighthouses and sea batteries, applicable also for the reclamation of land and for the building of bridges.	79	11th Jan. 1867	Henry Buss.
Collection and storage for distribution of rain-water	359	8th Feb. 1867	Arthur Ormsby.
Apparatus for regulating the supply of water to cisterns, and for preventing the bursting of water pipes.	383	11th Feb. 1867	George Hugh Kidd.
Uniting iron and steel in sheets, plates, rails, bars, rods, links, bands, hoops, tubes or other forms, applicable to navigable vessels, forts, bridges, roofs, floors, tanks or chests.	469	21st Feb. 1867	William Bridges Adams.
Generating heat by the admixture and combustion of a hydro-carbon vapor, air and the gaseous components of steam - - - - (*safety tank.*) (*Communicated by Henry Rutger Foote.*)	560	28th Feb. 1867	Stillman Boyd Allen. Jairus Handy Winsor.
Transporting, warehousing and barrelling petroleum, oil or liquids lighter than water.	583	2nd March 1867	Max Gossi.
Machinery for conveying, screening and loading coke and other materials - - - (*endless chains of buckets.*)	620	6th March 1867	John Robert Breckon. Robert Dixon.
Ball or supply valves - - - - (*for cisterns and reservoirs.*)	690	11th March 1867	Joseph Pearson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CISTERNS, &c.—*continued.*			
A combined slop pail and night commode - -	706	12th March 1867	Abner Parkinson. David Sweaney.
Apparatus to be applied to cisterns for preventing waste of water - - - - -	902	28th March 1867	Angus Mackenzie. Samuel Robinson.
Improvements in the construction of sea-walls, quays, jetties, piers and roadways, in the reclamation of land, in the formation of docks, reservoirs, basins and coast-harbours.	1018	5th April 1867	Henry Buss.
An improved machine for cutting scale-board, and for the manufacture of the scale-board or material cut by said machine into an improved fabric for structures generally. (*for tanks, cans, pails, tubs, &c.*) (*Communicated by John Kinney Mayo.*)	1051	8th April 1867	William Clark.
An improved system o tenders for locomotives - (*reservoir for feed water.*)	1347	7th May 1867	George Krauss.
Improvements in waterclosets and sinks, and in apparatus for supplying water thereto and conducting it therefrom, parts of which apparatus are applicable to other purposes. (*supplying cisterns.*)	1426	14th May 1867	Josiah George Jennings.
An improved apparatus for more effectually regulating the supply of water or other fluids to cisterns or other receptacles, and for economizing the trouble and expense connected therewith -	1 474	18th May 1867	James Theodore Bland. Edwin John Bland. Thomas Brevetor.
Manufacture of coal vases, buckets, casks, kegs, bins, baths, sugar funnels and other similar articles of hollow ware.	1786	19th June 1867	David Jones.
Manufacture of bails or handles for articles or vessels of hollow ware. (*for buckets.*)	1797	20th June 1867	David Jones.
Uniting and treating iron, steel and other metals in sheets, plates, rails, bars, rods, links, bands, hoops, tubes or other formes, applicable to navigable vessels, forts, guns, bridges, roofs, floors, boilers, heaters, tanks, chests or like structures.	2376	19th Aug. 1867	William Bridges Adams.
Portable apparatus for cleansing and filtering water for army and other purposes.	2564	10th Sept. 1867	James Rae.
Apparatus to be applied to cisterns for preventing waste of water - - - - -	2665	21st Sept. 1867	Angus Mackenzie. Samuel Robinson.
Improved methods of constructing steam generators for engines, new furnaces connected therewith, and the mode of working them, with machinery in combination with the uses to which they are applicable. (*storage tanks.*)	2792	4th Oct. 1867	Henry Pinkus.
An improved mode of preparing iron for the manufacture of various articles where great strength and capability of resistance to tensile strain or torsion is required. (*for construction of reservoirs.*) (*Communicated by Michel Pawlowitch Lwoff.*)	2865	11th Oct. 1867	William Edward Newton.
Apparatus for preventing effluvia entering tanks or cisterns from the waste pipe - -	3047	29th Oct. 1867	William Bishop. Benjamin Burningham.
Safety cans or vessels for containing, measuring or storing petroleum oil and other volatile inflammable liquids.	3344	26th Nov. 1867	James Hinks. Joseph Hinks.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CISTERNS, &c.—*continued.*			
An improved steam injector for supplying water to steam-boilers or tanks. (*Communicated by Neil Currie, James Currie and William Owen.*)	3350	26th Nov. 1867	Alfred Vincent Newton.
Handles for bails, buckets, cove hods, scoops and the like.	3418	2nd Dec. 1867	James Hill Dean.
Improved appliances and means for conveying salt-water fish through fresh water and overland and on land. (*Communicated by Adolphe Smidth.*)	3548	13th Dec. 1867	Leopold Auguste Damm.
CLOCKS, WATCHES AND OTHER TIME-KEEPERS; WATCH KEYS, CHAINS AND GUARDS.			
Clocks - - - - -	108	15th Jan. 1867	Jean Jacques. Emile Robert Houdin.
Improvements in the manufacture of watch cases and in apparatus employed therein.	144	19th Jan. 1867	Thomas Willis Willin.
Watch keys and other keys - - -	238	29th Jan. 1867	John Ritchie.
A new method of and apparatus for winding up clockwork. (*Communicated by Gustave Rey, jun^{r}.*)	532	26th Feb. 1867	Clinton Edgcumbe Brooman.
Apparatus for protecting watches in the pocket -	808	20th March 1867	Benjamin Jackson Smith.
Chronometers, watches and other timekeepers - (*Communicated by Jean Aimé Jacob.*)	824	21st March 1867	William Edward Newton.
Improvements in the mode of and machinery for manufacturing watches, part of which improvements is applicable to lathes generally where great accuracy is required.	880	26th March 1867	John Wycherley.
Apparatus for obtaining isochronous movements applied to clocks and other timekeepers. (*Communicated bg Joseph Pizzocheri.*)	1097	12th April 1867	William Clark.
Watches - - - - - -	1114	13th April 1867	Samuel Harrison.
A new and improved means of transmitting by electricity the hour and the synchronism of the hours between public and private clocks. (*Communicated by Victor Delay.*)	1275	2nd May 1867	Henri Adrien Bonneville.
Ratchet levers for actuating drills, screw drivers, watch keys and other like instruments.	1360	8th May 1867	Thomas Aldridge Weston.
Improvements in cases for clocks and in the method of manufacturing the same.	1394	11th May 1867	Charles Marlow.
An invention for the use of all kind of industry, and called the "perpetual movement" - - (*for clocks.*)	1425	14th May 1867	Jacques Joseph Bastin. Louis Anatole Baum.
Improvements in driving sewing-machines and in apparatus employed therefor. (*clockwork.*)	1462	17th May 1867	John Smith.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
Clocks, &c.—*continued.*			
Telegraphic instruments and electric clocks -	1531	23rd May 1867	Meinrad Theiler, sen^{r}. Richard Theiler. Meinrad Theiler.
Apparatus for applying and regulating motive-power. (*for toy watches.*) (*Communicated by Joseph de Susini.*)	1624	31st May 1867	Alexander Melville Clark.
Improvements in electrical clocks, which improvements may also be applied to other electrical instruments.	1641	4th June 1867	John Inshaw.
Indicating time by timekeepers - - - (*Communicated by Otto Peez.*)	1769	17th June 1867	George Tomlinson Bousfield.
An improved repeating striking movement for watches, clocks and timepieces. (*Communicated by Robert Theurer, Son and Company.*)	1779	18th June 1867	Charles Denton Abel.
Watches - - - - -	1844	25th June 1867	Joseph Wilkinson. William Grimshaw.
Clocks - - - - -	1915	1st July 1867	John Gay Newton Alleyne.
Chronographs or apparatus combined with chronometers and other timekeepers for measuring and indicating short intervals of time.	1957	4th July 1867	Arthur Anthony Champion.
New or improved machinery to be employed in the manufacture of watches and chronometers.	2032	11th July 1867	Joseph Boyes Fraser.
Improvements in watch cases, which improvements are also applicable to locket and miniature cases. (*Communicated by William Henry Halsey.*)	2252	3rd Aug. 1867	James Thomas Hatfield.
Watches - - - - - - - (*Communicated by Humbert Ramuz.*)	2388	20th Aug. 1867	Adolph Cohen.
An improved construction of lever-watch movements.	2455	28th Aug. 1867	William Borthwick Smith.
An improved method of and apparatus for attaching and securing watch chains and similar articles to vests and other garments - -	2751	30th Sept. 1867	William James. William Hill.
An hydraulic clock - - - -	3238	15th Nov. 1867	Athanase Airiau.
Escapement of watches and other timekeepers -	3298	21st Nov. 1867	John Forrest Watson.
Chronometers - - - - (*Communicated by Simon Vissière.*)	3396	29th Nov. 1867	Alexander Melville Clark.
Musical boxes - - - - -	3603	18th Dec. 1867	Onésime Aristide Hébert.
Improvements in the application of electricity to clocks, watches and other timekeepers, and in the apparatus employed therein. (*Communicated by Theodore Auguste Marie Sortais.*)	3684	27th Dec. 1867	Clinton Edgcumbe Brooman.
A mechanical tell-tale alarm pointing and reporting clock.	3693	28th Dec. 1867	Lewis Hasluck.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
COATING, COVERING, PLATING, SHEATHING.			
I.—Coating, Plating, Lining and Facing Metallic Surfaces with Metals or other Substances.			
An improved process of making foil of lead coated with tin. (*Communicated by William Woodman Huse.*)	323	5th Feb. 1867	Alfred Vincent Newton.
Improvements in the construction of electric telegraph conductors and in the method of preparing the same, also in the machinery and in the application of certain other machinery and apparatus employed therein.	694	11th March 1867	Donald Nicoll.
Improvements in coating metals and in apparatus employed therein and for like purposes.	810	20th March 1867	Gustav Bischof, junior.
Coating metal tubes and rods, to render them suitable for use for many ornamental purposes.	865	25th March 1867	Alexander Parkes.
Improved means of producing surfaces in relief or in intaglio for printing and other purposes. (*by galvano-plasty.*) (*Communicated by André Adolphe Disderi.*)	968	1st April 1867	Clinton Edgcumbe Brooman.
Improvements in the insulation of subterranean electric telegraph wires, and in laying the same.	1022	5th April 1867	Thomas Beaumont Marshall.
Improvements in obtaining useful products from certain materials produced in the process of galvanizing or coating iron with zinc.	1107	13th April 1867	Charles Crockford.
An improved method of and apparatus for galvanizing or tinning and zinking iron wire and other description of iron. (*Communicated by Emile Delacroix.*)	1169	22nd April 1867	William Edward Gedge.
Coating and ornamenting metallic or other surfaces (*Communicated by Edouard Dodé.*)	1342	7th May 1867	John Bennington Blythe.
Covering buckles, saddle-trees, turrets, hooks and other metallic trimmings for carriages and harness, with a coating of vulcanized or hard rubber, gutta-percha or other gum.	1630	1st June 1867	Andrew Albright.
Improvements in guns, projectiles and cartridges, and in the construction of the same. (*covering projectiles with softer metal.*)	1757	15th June 1867	George Clark.
Manufacture of electric telegraphic conductors -	1770	17th June 1867	Matthew Gray.
Improvements in the manufacture of electrical telegraphic conductors and in the means or apparatus employed therein.	1772	17th June 1867	Matthew Gray.
Projectiles and cartridges for ordnance and fire-arms. (*covering with a thin coat of tin.*)	1806	20th June 1867	John Webster Cochran.
Utilization of a certain waste material obtained in the manufacture of hydrocarbon liquids. (*for lining moulds.*)	1888	28th June 1867	John Carrington Sellars.
Mode of applying metal sheathing to iron ships, caissons and floating docks, and other iron constructions subject to corrosion.	1961	4th July 1867	William Day.
Preserving iron from oxidation - - - (*Communicated by Monsieur Alfred Delcelier.*)	2142	23rd July 1867	Hector Auguste Dufrené.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
COATING, &c.—*continued.*			
Mode of covering and protecting iron plates from the action of sea water.	2413	22nd Aug. 1867	John McIntyre.
A new method of bronzing metallic and other surfaces - - - - - -	2453	28th Aug. 1867	Joseph Storey. William Edward Bickerdike. William Virgo Wilson.
Apparatus for applying concentrated heat, and suitable for lighting fires, brazing and similar uses.	2491	3rd Sept. 1867	John McKechnie.
Improvements in means or apparatus to be employed to sewing-machines, and to other machines wherein cams or cam surfaces are employed working in connection with trucks or rollers, by means of which they are in working rendered comparatively noiseless. (*coating the roller axis.*)	2610	16th Sept. 1867	William John Cunningham.
Production of a glazed or vitrified surface on cast iron or other cast metal. - - -	2717	26th Sept. 1867	Erasmus Thomas Horsley. Charles Horsley.
An improvement or improvements in the manufacture of ornamental metallic tubes. (*covering with thin metal.*)	2749	30th Sept. 1867	Thomas Weston.
Improvements in the construction of telegraphic cables and in the apparatus for the manufacture thereof - - - - -	2942	19th Oct. 1867	Alfred Fauvin Jaloureau. Charles Louis Lardy.
An improved mode of covering steel or iron plates with copper, and manner of arranging or disposing such plates. (*Communicated by Edwin Turner Ligon and Thomas Jackson Foster.*)	3107	4th Nov. 1867	William Edward Newton.
Means and apparatus for covering wire with metal or other material - - -	3157	8th Nov. 1867	George West. Royston Pigott.
Manufacture of compound metallic plates - -	3205	12th Nov. 1867	James Humby.
Covering buckles, saddle-trees, turrets, hooks and other metallic trimmings for carriages and harness, with a coating of vulcanized or hard rubber, gutta-percha or other gum. (*Communicated by Andrew Albright.*)	3258	16th Nov. 1867	William Robert Lake.
Improvements in coating metals and metallic articles for the purpose of protecting or preserving the same from oxidation and decay.	3288	20th Nov. 1867	Baroness Camille de Lavenant.
Breech-loading fire-arms and cartridges - - (*covering metallic cartridge cases with leather cloth.*)	3301	21st Nov. 1867	William Jeremiah Murphy.
An improved mode of coating and uniting metals with metals.	3340	26th Nov. 1867	John Paterson Smith.
Construction of metallic and other buildings - (*lining walls with paper board.*)	3428	2nd Dec. 1867	Robert Porter.
An improved material or composition to be employed for covering or coating the interior surfaces of moulds, crucibles or ducts, previous to their receiving the molten metal in the process of casting and for other purposes.	3473	6th Dec. 1867	James Durrans.
An improved process for the reduction of tin so as to render it applicable for coating metals and for other purposes. (*Communicated by Jules Fenquiéres.*)	3517	11th Dec. 1867	Alexander Melville Clark.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
COATING, &c.—*continued.*			
Treatment of gutta-percha, indian-rubber, Honduras gum and the other allied gums, for the production of a preparation or preparations applicable as a varnish, cement, paint, stain, water and air proof material, solid or elastic material and for other purposes. (*for coating wires.*) (*Communicated by Daniel Reed.*)	3542	13th Dec. 1867	Edward Reed Sintzenich.
Improvements in guns, projectiles and cartridges, and in the construction of the same. (*coating projectiles with softer metal.*)	3562	14th Dec. 1867	George Clark.
An improved method of and apparatus for the manufacture of tinned leaden pipes. (*Communicated by Augustin Henry Hamon.*)	3591	17th Dec. 1867	William Edward Newton.
II.—Coating, Plating, Lining and Facing Glass, Wood, Stone, Plastic Materials, Textile Fabrics, &c.			
Waterproofing or encasing cartridges and other articles liable to injury by damp.	52	8th Jan. 1867	Eustace Carey Prentice.
Gilding, bronzing and colouring engraved, embossed and cut glass, and all other kinds of glass.	265	31st Jan. 1867	Edward Hugh Hughes.
Bushings for the bung holes of casks and similar vessels.	648	7th March 1867	William Hurrell.
An improved composition for coating or covering the surface of iron, wood, stone, brickwork and other substances or materials, to prevent oxidation and decomposition thereof.	657	8th March 1867	James Turner.
An improved mode of coating paper and other materials with fluid substances, solutions and compounds, for photographic and other purposes. (*Communicated by John Cushing Crosman.*)	659	8th March 1867	William Robert Lake.
Certain improvements in apparatus for covering woollen or fibrous yarns with an outer thread or yarn.	1047	8th April 1867	George Frederick James.
An improved method of adapting paper linings to the interior of casks, cases and packages of various descriptions.	1885	28th June 1867	Joseph Hélène Viton.
Improved machinery for making tapers - - (*coating cotton strands with wax.*)	1907	29th June 1867	Joseph James Lane.
Certain improvements in the preparation of waterproof paper - - - - - (*coating with pitch or tar.*)	2267	6th Aug. 1867	Thomas Whittaker. Martin Rourke.
A new method of bronzing metallic and other surfaces - - - - -	2453	28th Aug. 1867	Joseph Storey. William Edward Bickerdike. William Virgo Wilson.
Utilizing refuse animal matters and producing skins and sheets therefrom. (*for box and case covering.*)	2822	7th Oct. 1867	John Harcourt Brown.
Improvements in the construction of telegraphic cables and in the apparatus for the manufacture thereof.	2942	19th Oct. 1867	Alfred Fauvin Jaloureau. Charles Louis Lardy.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
COATING, &c.—*continued.*			
Improvements in the manufacture of felts and in machinery connected therewith.	2946	19th Oct. 1867	James Anderson.
Improvements in carpet linings and in machinery for manufacturing the same. (*Communicated by George Washington Chipman.*)	3005	25th Oct. 1867	William Robert Lake.
Improvements in the manufacture of circular webbing or gasket, applicable as packing for steam-engines, as covering for telegraph cables and other useful purposes, and in the machinery employed therein.	3046	29th Oct. 1867	Joseph Threlfall Carter.
An improved artificial compound chiefly designed for use as a substitute for india-rubber or caoutchouc. (*covering telegraph wires.*) (*Communicated by Austin Goodyear Day.*)	3108	4th Nov. 1867	William Robert Lake.
Improvements in the manufacture of waterproof fabrics and in articles formed of the same. (*Communicated by William Augustus Torrey.*)	3136	6th Nov. 1867	William Robert Lake.
Manufacture of flexible air-tight cylinders or cases to be used as pontoons and in forming rafts. (*cementing over them woven fabrics.*)	3175	9th Nov. 1867	George Frederick Parratt.
Details and fittings of windows, doors and other similar contrivances applied to buildings and other structures - - - - -	3206	12th Nov. 1867	James Carter. Thomas Chalmers.
Ornamenting bottles and other articles of glass or crystal. (*gilding, silvering, &c.*) (*Communicated by Charles Julien Aubertin.*)	3250	16th Nov. 1867	Clinton Edgcumbe Brooman.
Certain improvements in moulds for casting Bessemer steel and other metals. (*lining with tubes or plates.*)	3400	30th Nov. 1867	Richard McClure.
Certain improvements in the manufacture of waterproof or liquid-proof paper or glazed paper or fabrics. (*for lining or covering.*)	3437	3rd Dec. 1867	John Thorpe.
An improved material or composition to be employed for covering or coating the interior surfaces of moulds, crucibles or ducts, previous to their receiving the molten metal in the process of casting and for other purposes.	3473	6th Dec. 1867	James Durrans.
Treatment of paper and certain woven fabrics for rendering them ornamental and durable as articles of dress, and for decorative and ornamental purposes. (*coating with gutta-percha, &c.*)	3535	12th Dec. 1867	Edward Reed Sintzenich.
III.—Coating, Sheathing and Facing Ships; Compositions for the Purpose.			
Improvements in constructing and applying defensive armour and also bullet proof porthole covers for the defence of ships and other vessels, forts, batteries and other fortifications, parts of which improvements are applicable to other purposes.	193	25th Jan. 1867	Thomas Berney.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
COATING, &c.—*continued.*			
Improvements in the construction of armour plates, or in the method of fixing the same to ships, forts, turrets and other similar structures, part (or parts) of which improvements are applicable to other purposes.	308	4th Feb. 1867	Sir John Benson (Knight).
A new or improved composition for the coating and preservation of ships' bottoms.	425	15th Feb. 1867	James Lamble.
A method of protecting the outer surface or external parts of iron ships from corrosion or from animal or vegetable matter - - -	745	15th March 1867	Joseph Westwood. Robert Baillie.
Improvements in the preparation and application of isolating compositions for the protection of metallic surfaces from oxidation, and for the preservation of wood and other materials, and in the preparation of the residue of vegetable oils to be employed for such purposes. (*applying mastic to ships' hulls.*)	814	21st March 1867	Giacomo Eduardo Marchisio.
Manufacture of ships' sheathing, armour sheathing and fastenings.	856	23rd March 1867	Joseph Betteley.
Covering and protecting ships, forts and buildings	903	28th March 1867	William Richard Dawson. John Bailey Davies.
Armour plating and sheathing of ships of war and fortifications.	1082	11th April 1867	Theodore Anthony Rochussen.
Improvements in the manufacture of screws chiefly applicable for fixing armour plates.	1089	12th April 1867	Henry Patterson Boyd.
Improvements in the construction of landing stages and iron ships or vessels, also in propelling and steering ships or vessels generally. (*making iron armour plates.*)	1309	4th May 1867	Evan Leigh.
Construction of armour-plated ships and batteries -	1417	13th May 1867	James William Butler.
Improvements in the construction of a steam vessel suitable for ferrying laden trains across the ocean, complete, together with its landing-places, breakwaters and modes of protection from marine insects and fouling, which improvements are also generally applicable to other vessels, and to the protection of iron and wood exposed to the action of the sea-water.	1503	21st May 1867	Edward Henry Cradock Monkton.
A new metallic zinc paint - - - (*for coating ships' bottoms.*)	1845	25th June 1867	James Webster.
Improvements in compositions for preventing the fouling of the bottoms of ships, floating docks and other similar structures, and in the mode or means of applying the said compositions.	1924	2nd July 1867	George Augustus Frederick Fowke.
A new or improved composition for coating ships and other vessels and submerged structures.	2012	9th July 1867	Robert Smith.
Mode of covering and protecting iron plates from the action of sea-water.	2413	22nd Aug. 1867	John McIntyre.
Improvements in the treatment and application of the residuum which results from the clarification and purification of cotton-seed oil and other vegetable drying oils, and of the residuum which results from the distillation or other analogous treatment of the said material, for the manufacture and preparation of isolating preservative and anti-corrosive compositions.	2656	21st Sept. 1867	Giacomo Eduardo Marchisio.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
COATING, &c.—*continued.*			
A new or improved composition to be used to prevent the oxidation of iron, the fouling of ships' bottoms and other submerged things, and preserving wood from decay and from worms, and also preserving iron and wood exposed to the action of the atmosphere.	2848	10th Oct. 1867	Thomas Blackhurst.
An improved mode of preparing iron for the manufacture of various articles where great strength and capability of resistance to tensile strain or torsion is required. (*armour plates.*) (*Communicated by Michel Pawlowitch Lwoff.*)	2865	11th Oct. 1867	William Edward Newton.
Improvements in the manufacture of felts and in machinery connected therewith. (*for sheathing.*)	2946	19th Oct. 1867	James Anderson.
Improvements in plating or protecting ships of war, fortifications and other like structures, and the manufacture of the plates employed therefor.	3003	25th Oct. 1867	Gustav Julius Günther.
Manufacture of armour plates - - -	3019	26th Oct. 1867	Francis Montagu Smith.
Compositions for coating the bottoms of iron, steel and wooden ships and other navigable vessels, and marine works generally.	3028	28th Oct 1867	Joseph de Silva.
Mode of applying metal sheathing to composite ships with iron fastenings.	3095	4th Nov. 1867	William Day.
Construction of armour for the defence of ships, forts, batteries and other constructions.	3145	7th Nov. 1867	Edward Sacré.
Defensive armour for war vessels and forts - (*Communicated by Obadiah Marland.*)	3185	11th Nov. 1867	William Robert Lake.
Merchants' ships and other vessels and appliances connected therewith. (*protecting from damage.*)	3331	25th Nov. 1867	George Bell Galloway.
IV.—Covering Rollers.			
Coverings for rollers of machines which are required to be smooth and elastic - -	1219	27th April 1867	Joseph Moseley. Charles Moseley.
Improvements in the construction of elastic rollers for squeezing yarns and fabrics and for other purposes - - - -	2174	27th July 1867	John Smith. William Schofield.
Looms for weaving - - - -	3152	8th Nov. 1867	Thomas Blackburn.
Machinery for the manufacture of paper - - (*covering couching rollers.*)	3347	26th Nov. 1867	James Hudson, jun^{r}.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
COFFEE, COCOA AND TEA; COFFEE-POTS AND TEA-POTS, TEA CADDIES, TEA CHESTS.			
Manufacture of envelope cases, blotting books and other articles, commonly called "writing" or "library sets," and other similar articles. (*tea caddies and tea chests.*)	305	4th Feb. 1867	George William Betjemann.
Apparatus for separating the grounds from the liquid in making coffee. (*Communicated by Henry Josiah Griswold.*)	828	22nd March 1867	William Robert Lake.
Apparatus for making infusions of coffee and other infusions.	1281	2nd May 1867	Frederick Walton.
An improved coffee pot - - - - (*Communicated by Howard Tilden.*)	1375	9th May 1867	Thomas Brown.
An improvement or improvements in tea pots, coffee pots and other vessels.	1557	25th May 1867	William Ryland.
An improvement in the preparation of chocolate and cocoa.	2102	17th July 1867	Christian Klug.
A new coffee injector - - - -	2250	3rd Aug. 1867	John Frederick Fenton. Frank Fenton.
Tea and coffee pots - - - - (*Communicated by George Jones.*)	3370	28th Nov. 1867	Edward Thomas Hughes.
Bags for coffee and other such like pots - -	3462	5th Dec. 1867	John Mabson.
Apparatus for roasting coffee - - - (*Communicated by Charles Gustavus Mueller.*)	3653	24th Dec. 1867	Saul Myers.
COFFINS, TOMBSTONES, EMBALMING.			
Preserving animal or vegetable matters, whether fluid or solid, in a wholesome and edible condition, without material loss or change of their natural flavour. (*or embalming.*) (*Communicated by Lewis Hobart Spear.*)	379	9th Feb. 1867	William Clark.
An improved mode of embalming or preserving dead bodies and carcasses. (*Communicated by George Washington Scollay.*)	1044	6th April 1867	William Robert Lake.
An improved process of embalming and preserving animal substances from decay, for anatomical purposes.	1850	25th June 1867	Ludovico Brunetti.
Manufacture of coffins - - - -	3283	20th Nov. 1867	Samuel Coalson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
COINS AND MEDALS; BULLION BOXES.			
Improved means of fastening and better securing bullion boxes, boxes and other like packages used for containing and conveying other valuable commodities.	282	1st Feb. 1867	Frederick Ashford.
Coining presses - - - - -	2398	21st Aug. 1867	James Murdoch Napier.
Improvements in and applicable to hydraulic and other presses, parts of which improvements may be employed for or with other descriptions of machinery - - - - - (*coining and medalling.*)	2454	28th Aug. 1867	William Thomas Watts. Daniel Joseph Fleetwood.
COMBS.			
Improvements in the manufacture of combs and in the machinery or apparatus employed therefor.	4	1st Jan. 1867	George Stewart.
An improved process of preparing raw hide for the manufacture of various articles. (*combs.*)	394	12th Feb. 1867	William Henry Towers.
COMPASSES; MEASURING ANGLES; SURVEYING AND LEVELLING; MATHEMATICAL AND ASTRONOMICAL INSTRUMENTS; ASCERTAINING LONGITUDE.			
Levelling and certain other mathematical instruments. (*Communicated by Mr. François Delsarte.*)	433	16th Feb. 1867	George White.
Improved means and apparatus for protecting the needles of mariners' and other compasses from local attraction.	676	9th March 1867	John Sacheverell Gisborne.
Improving the process for finding the variation or error or deviation from the meridian on the common steering compass.	1098	13th April 1867	Robert Shortrede.
An improved level - - - - (*Communicated by Charles Wells.*)	1218	27th April 1867	John Webster Cochran.
Ships' compasses - - - -	1620	31st May 1867	The Right Honourable James, Earl of Caithness.
A regulating level - - - - (*Communicated by André Durand.*)	2005	9th July 1867	William Edward Gedge.
A certain improvement in nautical compasses -	2059	13th July 1867	Pierre Michel Albert Laurent.
The combination of a bottle and compass, and the mode of combining the same.	2074	15th July 1867	Gustav Boehm.
Improvements applicable to ships' compasses -	2183	27th July 1867	George Franklin.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
COMPASSES, &c.—*continued.*			
Preventing the deviation of the compasses of iron or steel ships.	2592	13th Sept. 1867	Frederick Arthur Paget.
Construction and mode of propelling and maneuvering floating batteries and other vessels intended for the purposes of naval defence and attack. (*construction of compass.*)	2743	28th Sept. 1867	John Elder.
An improved mode of preparing iron for the manufacture of various articles where great strength and capability of resistance to tensile strain or torsion is required. (*for mathematical instruments.*) (*Communicated by Michel Pawlowitch Lwoff.*)	2865	11th Oct. 1867	William Edward Newton.
An improved level - - - - (*Communicated by John Webster Cochran and Charles Wells.*)	3017	26th Oct. 1867	William Robert Lake.
An improved apparatus for indicating horizontal, vertical or any angular or inclined line, position or surface.	3154	8th Nov. 1867	Isaac McKimm.
Improved proportional compasses and dividers -	3607	19th Dec. 1867	William Alexander Hubbard.
CONDENSING, COOLING, FREEZING.			
An improved apparatus for working "punkahs," the same being also applicable for watering tatties. (*for cooling the air.*)	34	5th Jan. 1867	George Logan.
Certain improvements in fluid safety guages for steam-boilers and other pressure and vacuum vessels.	511	25th Feb. 1867	John Marshall.
Generating heat by the admixture and combustion of a hydro-carbon vapor, air and the gaseous components of steam - - - - (*air condensing vessel.*) (*Communicated by Henry Rutger Foote.*)	560	28th Feb. 1867	Stillman Boyd Allen. Jairus Handy Winsor.
Improvements in the means and apparatus for producing oxygen, and in the application of the same for metallurgical and other purposes. (*Communicated by Henri Adolphe Archereau.*)	568	28th Feb. 1867	William Clark.
Condensing steam-engines - - -	586	2nd March 1867	John Wild the younger.
Improvements in means or apparatus for generating, superheating and condensing steam, and heating or boiling water or other liquids, parts of which are applicable to other purposes - -	601	4th March 1867	James Marchent. John Parker.
Process and apparatus employed in cooling and freezing liquids.	625	6th March 1867	Henry Clarke Ash.
Engines worked by heated air and by other suitable heated gas or gases. (*cooling the hot air.*)	633	7th March 1867	Alphonse Louis Normandy.
Apparatus connected with steam-boilers - -	679	9th March 1867	Robert David Napier.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CONDENSING, &c.—*continued.*			
Improvements applicable to the ventilation of theatres, churches and other large buildings, and in purifying and cooling the air supplied thereto. (*Communicated by Henri Cabanes.*)	722	13th March 1867	William Edward Newton.
Machinery or apparatus for refrigerating purposes, used in breweries and distilleries.	787	19th March 1867	Francis Gregory.
Improvements in coolers for wine and other liquids and substances, and in vessels for protecting liquids and other substances from undesired effects of the atmosphere or atmospheric temperature, also in covers or stoppers for the same and other articles.	817	21st March 1867	Henry Clifton.
Refrigerators, ice safes and preserving cabinets -	818	21st March 1867	Henry Clifton.
An improved process for manufacturing ice, and for other refrigerating purposes. (*Communicated by Thaddeus Sobeski Carlincourt Lowe.*)	952	30th March 1867	William Edward Newton.
Improvements in applying and fitting the tubes of multitubular boilers, condensers and other like capacities, and in apparatus for the same. (*Communicated by Victor Langlois.*)	988	2nd April 1867	William Clark.
An improved machine for cutting scale-board, and for the manufacture of the scale-board or material cut by said machine into an improved fabric for structures generally. (*for ice house floors.*) (*Communicated by John Kinney Mayo.*)	1051	8th April 1867	William Clark.
Improvements in obtaining useful products from certain materials produced in the process of galvanizing or coating iron with zinc. (*condensing vapour.*)	1107	13th April 1867	Charles Crockford.
Apparatus for introducing and controlling the introduction of fluids to surface condensers of steam-engines.	1351	7th May 1867	Norman Willis Wheeler.
Apparatus for generating and condensing steam -	1419	13th May 1867	Edward Field.
Improvements in the means of raising liquids and in apparatus for the same. (*Communicated by Pierre Léon Margot, jun^{r}.*)	1427	14th May 1867	Alexander Melville Clark.
Machinery or apparatus for separating liquids or moisture from substances, and also for revivifying and cooling animal charcoal and other substances, and for treating sugar.	1605	30th May 1867	William Orr.
An improved mode of and apparatus for producing cold.	1621	31st May 1867	Rees Reece.
Improvements in machinery or apparatus for separating liquids or moisture from substances, and also for revivifying and cooling animal charcoal and other substances, and for treating sugar.	1707	10th June 1867	William Orr.
Refrigerators for cooling worts and other liquids -	1738	14th June 1867	Charles Askew.
Improvements in the means of cooling beverages, also applicable for preserving substances from the action of heat. (*Communicated by Auguste Charles Joseph Lengelée and Paul Fréderic Rozée.*)	1751	15th June 1867	Alexander Melville Clark.
Certain improvements in casting ingots of Bessemer or other steel.	1833	24th June 1867	John Birch.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CONDENSING, &c.—*continued.*			
Apparatus for the manufacture of iced beverages - (*Communicated by Gustave D. Dows, Adolphe Clarck and Abraham Van Winkle.*)	1875	27th June 1867	William Edward Newton.
Improved means of and apparatus for washing and drying moist substances, or drying and burning granular substances, or evaporating liquid substances, and for economizing the waste heat produced in such processes. (*and cooling.*)	1930	2nd July 1867	George Gordon.
Refrigerators or apparatus for cooling worts and other liquids.	1988	6th July 1867	George Severn.
An improved ice-making apparatus - -	1989	8th July 1867	John Whitford.
Improvements in refrigerators for cooling worts and other liquids, which improvements are also applicable to condensers used in distillation -	2031	11th July 1867	Joseph Stirk. Horatio Bycroft.
A continuous self-acting condenser, being an improved boiler feeding apparatus.	2077	15th July 1867	Julian Brière.
Steam generators and condensers - - -	2097	17th July 1867	John Slater.
Improvements in apparatus for indicating and registering the pressure of steam in steam generators, and the pressure in hydraulic presses and other vessels or chambers, which improvements are also applicable to indicating and registering pressure and vacuum in steam-engines, the vacuum in condensing apparatus, also to indicating and registering the combined pressure of the steam or other power employed to give motion to an engine, and the speed of such engine or other machinery, also to indicating and registering barometrical variations. (*Communicated by Bernhard August Schäffer and Christian Friedrich Budenberg.*)	2249	3rd Aug. 1867	Arnold Budenberg.
A refrigerator for cooling wort - - -	2258	5th Aug. 1867	James Dale.
Refrigerating apparatus applicable for the manufacture of ice and for other refrigerating purposes. (*Communicated by Jean Baptiste Toselli.*)	2303	10th Aug. 1867	Alexander Melville Clark.
Cooling brewers' worts and beer - - -	2330	13th Aug. 1867	Charles Edward Flower.
Apparatus for the aëration of fresh water obtained by the distillation of sea water. (*Communicated by Theodore Perroy.*)	2452	28th Aug. 1867	John Henry Johnson.
Apparatus for producing artificial ice, parts of such apparatus being also applicable to other purposes.	2544	9th Sept. 1867	Edward John Cowling Welch.
Apparatus for heating, evaporating and cooling liquids.	2593	13th Sept. 1867	William Fothergill Baths.
Improvements in apparatus for regulating automatically the supply of gas, air and water, or any one or more of them, to steam-boilers heated by gas or otherwise, and for utilizing the heat of the gases produced or heated by combustion. (*cooling contents of boiler.*)	2674	23rd Sept. 1867	Charles Ritchie.
Improvements in refrigerators for cooling worts and other liquids, which improvements are also applicable to condensers.	2707	26th Sept. 1867	James Oxley.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CONDENSING, &c.—*continued.*			
An improved mode of and means for preventing the bursting of the tubes in steam and water pressure gauges, and other tubes or pipes, from the effects of cold. (*tubes of condensers.*) (*Communicated by Ernest Dubois.*)	2925	18th Oct. 1867	Edward Caspar.
Cooling or refrigerating water - - -	2944	19th Oct. 1867	John Schwartz.
Improved modes of and means for curing, drying, preserving and packing meat, fruit, vegetables and other perishable substances. (*cooling packing-houses.*) (*Communicated by Daniel E. Somes.*)	3006	25th Oct. 1867	William Robert Lake.
Apparatus for distilling, heating, evaporating and cooling liquids.	3148	7th Nov. 1867	John Frederick Brinjes.
Tubular boilers - - - - - (*Communicated by Louis Barret.*)	3212	13th Nov. 1867	Alexander Melville Clark.
An improved gas engine - - - - (*Communicated by Jean Mazieres and Jules Trottier.*)	3237	15th Nov. 1867	William Edward Gedge.
Improvements in preserving meat and in apparatus employed therein. (*by refrigeration.*) (*Communicated by Thomas Sutcliffe Mort.*)	3323	23rd Nov. 1867	William Mort.
Condensers - - - - -	3470	5th Dec. 1867	Edmund Alfred Pontifex.
CONFECTIONERY.			
An improved process for manufacturing ice and for other refrigerating purposes. (*for manufacture of creams.*) (*Communicated by Thaddeus Sobeski Carlincourt Lowe.*)	952	30th March 1867	William Edward Newton.
Apparatus for the manufacture of iced beverages - (*soda creams.*) (*Communicated by Gustave D. Dows, Adolphe Clarck and Abraham Van Winkle.*)	1875	27th June 1867	William Edward Newton.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
COOKING AND APPARATUS USED IN COOKING.			
Cans, kettles and other vessels having handles applied thereto.	437	16th Feb. 1867	Ebenezer Stevens.
Improvements in gas-cooking apparatus, and in steaming, baking, boiling and roasting apparatus - - - - - -	439	18th Feb. 1867	William Hill. Henry Charles Wilberforce.
Steam cooking and baking apparatus - -	746	15th March 1867	William Henry Graveley. James Ewing.
Annealing or treating cast-iron articles - - (*hollow ware.*)	763	16th March 1867	John Kennedy.
A new or improved pan for cooking omelettes or for other similar purposes.	1148	20th April 1867	Anne Eliza Griffiths.
A combined gas lighting and cooking apparatus -	1191	24th April 1867	Thomas South.
Improvements in or additions to egg boilers for the table.	1424	14th May 1867	Benjamin Barrett. Henry Mackenzie.
A new oil or gas stove - - - - - (*for cooking.*)	1653	5th June 1867	Thomas Harvey Saunders.
Manufacture of bails or handles for articles or vessels of hollow ware. (*for saucepans, kettles, &c.*)	1797	20th June 1867	David Jones.
Means or apparatus for the production of gas for illuminating and other uses, from hydrocarbons, which apparatus is also adapted to be used for culinary and other heating purposes -	1849	25th June 1867	Adam Aitchison. Thomas South.
Hot-air ovens for baking bread, biscuits, pastry, cooking, drying or desiccating flour and other materials.	1853	25th June 1867	Henry Veillon.
Heating and cooking apparatus - - - (*Communicated by Oscar Fitzallan Morrill.*)	2110	18th July 1867	George Tomlinson Bousfield.
Kitchen or cooking ranges - - -	2329	13th Aug. 1867	John Badger.
An improved self-acting cooking apparatus - - (*Communicated by Juan Sörensen.*)	2417	23rd Aug. 1867	Henri Adrien Bonneville.
Apparatus to be used for boiling eggs and for like purposes.	2750	30th Sept. 1867	Ira Dimock.
Apparatus to be used in cooking by means of gas -	2931	18th Oct. 1867	Henry John Bale.
Method of and apparatus for warming and heating solid and liquid food for children and invalids.	3310	22nd Nov. 1867	Thomas George Fonnereau Dolby.
Improvements in the manufacture of gas, and in the treatment and application of such and other gases for cooking, warming, lighting, generating of steam and other purposes, combined with their use as a motive-power previous to being burned or consumed, and improvements in the apparatus for these purposes.	3318	23rd Nov. 1867	Peter Salmon.
An improved lighting, heating and cooking apparatus, part of which is applicable to other purposes. (*Communicated by Zoeth Durfee.*)	3451	4th Dec. 1867	Edward Thomas Hughes.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
COPYING, TRACING, DRAWING AND WRITING.			
A mechanical process of electro-engraving by means of an electro-magnetic engraving machine	364	8th Feb. 1867	Pierre Elie Gaiffe. Amédée Arthur Lalance.
Means and apparatus for reproducing or copying letters and manuscripts. (*Communicated by Pierre Alexandre Georges, Niepce De St. Victor and Manuel Leopold Jonas Lavater.*)	986	2nd April 1867	William Clark.
Apparatus for facilitating the means of learning how to write. (*Communicated by Léon Woog.*)	1276	2nd May 1867	Henri Adrien Bonneville.
"Nature printing" from plants, leaves or other natural objects.	1432	15th May 1867	Henry Craven Baildon.
Taking copies of lithographs, zincographs and other printed matters.	1562	27th May 1867	William Paul Metchim.
Application of plastic and fibrous materials to the manufacture of moulded or formed articles. (*casts of the human figure.*)	1700	10th June 1867	John Macintosh.
Improvements in machines for ruling paper, part of which improvements is also applicable to guiding paper into printing and other machines	1946	3rd July 1867	James Salmon. George William Hick.
A finger stall intended for writing with a single finger (*see* "PENS.")	1969	5th July 1867	Pierre Louis François Eustache Roussel.
Construction of instruments or apparatus for ruling parallel, angular and curved lines. (*Communicated by Thomas Piatti.*)	2070	13th July 1867	John Garrett Tongue.
A new or improved material to be used as a substitute for oiled silk, bladders, gut-skins, india-rubber, and other waterproof materials and leather. (*for tracing paper.*)	2604	14th Sept. 1867	John Jeyes.
Utilizing refuse animal matters and producing skins and sheets therefrom. (*for writing, drawing and tracing.*)	2822	7th Oct. 1867	John Harcourt Brown.
Improvements in preparing the surfaces of paper or other material for drawing purposes, and in the application of the same to lithographic and other kinds of printing.	2844	9th Oct. 1867	Thomas Nelson.
Making moulds for the manufacture of metallic screws. (*for copying presses.*)	3038	28th Oct. 1867	William Potts.
Method of tinting or colouring photographs, engravings, water colour and other drawings, or porcelain.	3057	30th Oct. 1867	Frederick Piercy.
Improvements in various articles of furniture, for the purpose of adapting them to additional useful purposes - - - - (*writing desk.*) (*Partly communicated by Frederick Wasielewski.*)	3182	11th Nov. 1867	George Ellis. Mark Jacobson.
Machinery for ruling ornamental patterns or devices	3322	23rd Nov. 1867	Samuel Amphlet. Joseph Beverley Fenby.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CORK; CORKS AND BUNGS.			
An improved process for uniting cork or leather either separately or combined.	878	26th March 1867	Joseph Toussaint.
An improved stopper for bottles, jars, casks and other vessels - - - - -	2021	10th July 1867	Howard Busby Fox. James Turner Hall.
Machinery for cutting corks - - -	2360	16th Aug. 1867	John William Dudley.
Method of and materials for manufacturing ammunition boxes, pontoons, baggage and other waggons and carriages, and various equipments for military, naval and civil purposes.	2630	19th Sept. 1867	Thomas Charles Clarkson.
An improved device for bunging barrels or casks - (*Communicated by John Ruigg and Joseph Gambrill Marriott.*)	2850	10th Oct. 1867	William Robert Lake.
Improvements in corks or stoppers for bottles and in machinery for manufacturing the same -	2943	19th Oct. 1867	Leopold Newton. John Swailes.
Improvements in bottles, in corks or stoppers for bottles, and in machinery for making corks or stoppers - - - - - -	3018	26th Oct. 1867	Leopold Newton. Thomas Kershaw.
Bungs for casks, tuns or other similar vessels for containing liquids.	3204	12th Nov. 1867	Léos Antoine Badin.
CUTTING, SAWING, PLANING.			
I.—Cutting, Sawing, Planing, &c., Metal, Stone, Wood, Cork and Slate.			
Improvements in planing machines, which improvements are also applicable to other machines and engines in which sliding surfaces are employed.	2	1st Jan. 1867	William Muir.
An improved bench planing machine - - (*Communicated by Joseph Jones.*)	3	1st Jan. 1867	Andrew Dwight Campbell.
Applying teeth to saws - - - -	21	3rd Jan. 1867	Wendell Lamoreux.
Improved apparatus for regulating, controlling, and for varying the speed of shafts and machinery. (*circular saw benches.*)	51	8th Jan. 1867	Robert Robinson.
Improvements in the means whereby tools or operating implements, instruments, appliances or parts of machinery or apparatus may be moved to and worked at various parts of articles or surfaces to be operated on by the same. (*cutting, planing, slotting, &c.*) (*Communicated by Norbert Belvallette.*)	105	15th Jan. 1867	Michael Henry.
Ornamenting, printing, cutting, creasing, bending, embossing and manufacturing articles from wood and other materials.	155	22nd Jan. 1867	Edward Tomlinson.
Improvements in machine tools for manufacturing parts of locomotive engines, parts of which improvements are also applicable to other similar or analogous purposes. (*planing machines.*)	334	6th Feb. 1867	Stephen Atley.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CUTTING, &c.—*continued.*			
Mode of attaching teeth to saws - - - (*Communicated by Warren P. Miller.*)	351	7th Feb. 1867	William Clark.
Machinery or apparatus for boring and planing metals.	361	8th Feb. 1867	Henry Allason Fletcher.
Machinery for cutting and polishing metals -	410	14th Feb. 1867	John Thompson.
Applying motive-power to saw frames - -	478	21st Feb. 1867	John Robinson. John Smith.
A novel method of cutting veneers - - (*Communicated by John Burns Wilson.*)	570	28th Feb. 1867	Alfred Vincent Newton.
Improvements in machinery for cutting, shaping and polishing mouldings and shapes of circular, oval or irregular curved forms in stone, wood or other materials, part of such improvements being applicable for veneering mouldings of similar forms.	604	4th March 1867	Robert Thompson.
Manufacture of metallic rollers used in preparing or treating cotton and other fibrous substances. (*fluting.*)	666	8th March 1867	Joshua Horton the younger.
Improvements in machinery or apparatus for raising, lowering and moving heavy bodies, which improvements are also applicable for operating punching machines, screw presses, and the feed motion of circular and other saws and wood planing machines.	822	21st March 1867	James Alfred Limbert.
Machinery for cutting channels in stone and for working in quarries. (*Communicated by George Jeffards Wardwell.*)	864	25th March 1867	William Edward Newton.
Manufacture of plane irons and other edge tools -	891	27th March 1867	Edwin Wilkinson Shirt.
Machinery for cutting wood - - -	898	27th March 1867	Samuel William Worssam.
Improvements in machinery employed in getting coal and other minerals, and in rail or tramways to be used therewith.	964	30th March 1867	James Grafton Jones.
An improved machine for cutting scale-board, and for the manufacture of the scale-board or material cut by said machine into an improved fabric for structures generally. (*Communicated by John Kinney Mayo.*)	1051	8th April 1867	William Clark.
Improvements in cutting and dressing millstones, and in apparatus to be employed for such purpose. (*Communicated by Samuel Golay.*)	1245	30th April 1867	George Davies.
An improved fret sawing machine - -	1246	30th April 1867	Robert Booth. Richard Wilson Booth.
Machinery or apparatus for working wood - -	1366	9th May 1867	Samuel William Worssam, jun^{r}.
Mining, tunnelling and stone dressing machines, and valve motion therefor. (*Communicated by Richard Channing More Lovell.*)	1566	27th May 1867	William Snell.
Apparatus for punching, cutting and embossing -	1702	10th June 1867	Andrew Linmere Dowie. Robert M^{c}Intyre.
Saws and saw-teeth - - - - (*Communicated by Ira Stillman Brown, Charles Noyes Brown and John Mason Gross.*)	1756	15th June 1867	William Robert Lake.
Apparatus by which the oscillations of the comb in the carding-engine, the knife in the cotton gin, and the saw in the reaping-machine or reciprocating saw, may be readily multiplied - -	1809	21st June 1867	William Robertson. Charles James Waddell.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CUTTING, &c.—*continued.*			
Tenon cutting machines - - - -	1813	21st June 1867	John Powis. Jabus Stanley James.
Machines for manufacturing circular cutters and milling tools.	1956	4th July 1867	Paul François Franchat.
Wood-planing machines - - - - (*Communicated by Baxter Doddridge Whitney.*)	2029	10th July 1867	Alexander Horace Brandon.
An improved circular saw machine - - (*Communicated by Baxter Doddridge Whitney.*)	2030	10th July 1867	Alexander Horace Brandon.
Machinery for tenoning wood - - -	2047	12th July 1867	William Blackett Haigh.
Means and apparatus for ornamenting, printing, coloring, enamelling, staining, cutting, creasing, bending and manufacturing articles from wood and other materials.	2139	23rd July 1867	Edward Tomlinson.
Machinery for cutting tenons - - -	2148	23rd July 1867	William Geeves.
An improved machine for cutting slate in quarries previous to laying them open, and for cutting in coal pits, mines and stone quarries. (*Communicated by Joseph Debry.*)	2177	27th July 1867	William Edward Gedge.
Machinery for cutting into lengths tapes or wax threads for vesta matches, and placing the said lengths in laths or clamps, and for cutting into lengths spills or other strips or rods.	2231	1st Aug. 1867	John Birch.
An improved system of flattening and straightening saws and similar plates or blades of steel during the process of hardening.	2248	3rd Aug. 1867	John Russell.
Machinery for reducing wood to shreds to be used in the manufacture of paper pulp.	2261	5th Aug. 1867	Constantine de Negri.
Machinery for the manufacture of cut nails - (*Communicated by John Henry Geary.*)	2296	9th Aug. 1867	Richard Heathfield.
Construction of machines for splitting or for splitting and cutting sarsaparilla and other woody or vegetable fibrous substances. (*Communicated by Monsieur Gruvel, fils.*)	2310	12th Aug. 1867	Erembert Courtin.
Improvements in machinery for cutting grooves in knotch boards of stairs, ladder strings, uprights for louvre boards, and in other articles requiring such grooves.	2332	13th Aug. 1867	Thomas Walker.
Machinery for cutting corks - - -	2360	16th Aug. 1867	John William Dudley.
Machinery for cutting, crushing, bruising or otherwise preparing furze or gorse, straw, bark or other vegetable substances.	2373	17th Aug. 1867	Wallis Rivers Goulty.
Applying motive-power to saw frames - -	2393	21st Aug. 1867	John Robinson. John Smith.
Improved apparatus for cutting or forming metal joints.	2406	22nd Aug. 1867	William Newsome.
Improvements in machinery used in cutting coal, stone, slate and other minerals, and in forming tunnels and galleries, and for other quarrying purposes.	2451	28th Aug. 1867	John Elliott.
Improvements in and applicable to hydraulic and other presses, parts of which improvements may be employed for or with other descriptions of machinery - - - - - (*shearing.*)	2454	28th Aug. 1867	William Thomas Watts. Daniel Joseph Fleetwood.
An improved mode of cutting up iron and steel rails and rail ends in order to utilize them -	2463	29th Aug. 1867	John Dyson. George Walter Dyson. Stephen Martin.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CUTTING, &c.—*continued.*			
An improved manufacture of tool for cutting stone. (*Communicated by William Shaw Campbell.*)	2485	2nd Sept. 1867	Alfred Vincent Newton.
Improved machinery for cutting, carving and engraving upon ivory, wood, stone, metals and other substances. (*Communicated by Isaac Hall.*)	2497	3rd Sept. 1867	Alexander Melville Clark.
Anvils - - - - - - (*with shears.*) (*Communicated by James Ezekiel Emerson.*)	2578	11th Sept. 1867	William Edward Newton.
Saws - - - - - - (*Communicated by James Ezekiel Emerson.*)	2579	11th Sept. 1867	William Edward Newton.
Means or apparatus employed in drilling, surfacing, cutting and ornamenting metal, wood and other substances.	2732	27th Sept. 1867	Frank Branscombe.
Improvements in bottles, in corks or stoppers for bottles, and in machinery for making corks or stoppers - - - - -	3018	26th Oct. 1867	Leopold Newton. Thomas Kershaw.
Machinery for the manufacture of cut nails - (*Communicated by Cyrus Dexter Hunt.*)	3246	15th Nov. 1867	Richard Heathfield.
An improved tool to be used for cutting rocks or stone and other similar substances. (*stone for building.*)	3311	22nd Nov. 1867	Archibald Munro.
Improvements in the manufacture of cutting tools and in the construction of tool holders. (*for planing machines.*)	3339	26th Nov. 1867	John Paterson Smith.
Improvements in machinery for cutting or dressing stone and in apparatus connected therewith.	3354	27th Nov. 1867	Charles Coates.
Machinery for shaping cask headings and similar articles.	3497	9th Dec. 1867	William Clapperton.
Saws - - - - - - (*Communicated by Peter Cook.*)	3522	11th Dec. 1867	Thomas Aldridge Weston.
Bench planes and moulding tools - - - (*Communicated by Nelson Palmer.*)	3552	13th Dec. 1867	William Edward Newton.
Means or apparatus for effecting the cutting or dressing of stone - - - -	3571	16th Dec. 1867	Joseph Booth. John Booth. Jeremiah Booth.
An improved mode of reducing the friction of revolving and sliding surfaces. (*tables of shaping machines.*)	3628	21st Dec. 1867	Edward Lord.
Machinery for cutting and heading nails - -	3651	23rd Dec. 1867	Matthew James Rice.
An universal machine for manufacturing circular cutters and milling tools of any form or outline, with either a rectangular or a helicoidal direction of cut.	3655	24th Dec. 1867	Paul François Tranchat.
For cutting or getting coal, *see* "MINING." For cutting and rasping dye woods, *see* "DYES." For cutting files, *see* "FILES AND RASPS." For cutting screws, *see* "NAILS."			
II.—Cutting Paper, India-rubber and Tobacco; Cutting and Splitting Leather and Cloth.			
Machinery for the manufacture of boots, shoes and other coverings for the feet - - - (*cutting up leather.*)	418	14th Feb. 1867	Thomas Greenwood. John Keats.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CUTTING, &c.—*continued.*			
An improved combined reel frame and thread cutter.	598	4th March 1867	Richard Edward Keen.
Machinery for the manufacture of hats or coverings for the head. (*cutting the brims.*)	942	30th March 1867	Joseph Edwin Ward.
Cutting india-rubber or other materials into strips or thread.	1193	24th April 1867	Frank Crossley.
Apparatus for punching, cutting and embossing -	1702	10th June 1867	Andrew Linmere Dowie. Robert McIntyre.
Improved machinery for making tapers - - (*cutting into lengths.*)	1907	29th June 1867	Joseph James Lane.
Presses for cutting paper - - - -	1920	2nd July 1867	James Robert Burn.
Machinery for india-rubber thread cutting - -	2280	7th Aug. 1867	Milton Hamer.
Machinery for the manufacture of paper bags . -	2283	7th Aug. 1867	Joseph Pickles Binns.
Manufacture of gloves, undershirts, drawers, socks, stockings, and other articles of clothing which are usually made from knitted or looped fabrics	2311	12th Aug. 1867	Archibald Turner. William Hemsley.
Mode of removing and cutting the hides of animals for the manufacture of driving bands or tubes of leather. (*Communicated by Alois Eschenlohr.*)	2471	30th Aug. 1867	Alexander Melville Clark.
Certain improvements in mechanism or apparatus employed for cutting paper, pasteboard, textile fabrics and similar substances or materials.	2911	17th Oct. 1867	Robert Craib Ross.
An improved method for producing from one piece of writing paper a sheet of note or letter paper and an envelope to enclose the said sheet of paper, also for other improvements connected therewith.	2966	22nd Oct. 1867	Nicolas Alfred Thoumelet.
Machinery or apparatus employed in the clipping of lace and other fabrics.	3109	5th Nov. 1867	William Marshall.
Manufacture of parasols - - - - (*cutting the gores.*)	3167	9th Nov. 1867	Henry Ellis.
Improvements in the method of sewing sheets of paper, forming books and pamphlets, and in machinery for effecting the same - - (*cutting and retaining the thread.*)	3306	22nd Nov. 1867	Robert Leighton. Thomas Kirkham.
Machinery or apparatus for cutting woollen and cotton corduroy or other similar fabrics.	3372	28th Nov. 1867	William Cotton.
A new instrument for clipping or shearing horses or other animals, also applicable to other similar useful purposes. (*cutting cloth.*)	3498	9th Dec. 1867	William Clark.
An improved machine for cutting the hair or fur from skins, for hat-making and for the manufacture of felt.	3703	30th Dec. 1867	Joseph Aschermann.

For cutting roots, &c., *see* "FOOD FOR CATTLE."
For cutting sugar, *see* "SUGAR."
For cutting rags for paper-making, *see* "PAPER."
For cutting soap, *see* "SOAP."

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CYLINDERS, ROLLERS, DRUMS; COVERING ROLLERS.			
Paper-making machinery - - - -	30	4th Jan. 1867	Ebenezer Noah Gregory.
Machinery for felting hat bodies - - - (*Communicated by Job William Blackham.*)	97	14th Jan. 1867	George Haseltine.
Improvements in rolling and shaping metals, and in the machinery or apparatus employed therein.	196	25th Jan. 1867	William Gray.
Improved arrangements of drawing rollers used in machinery for preparing and spinning fibrous materials.	216	26th Jan. 1867	Jacob Taylor.
Machinery for roving and spinning wool and other fibrous materials. (*Communicated by Edwin Allen and Henry Tatem Potter.*)	219	26th Jan. 1867	George Haseltine.
Forming shafts, rollers, drums and wheels with india-rubber surfaces.	289	2nd Feb. 1867	John Poole.
New or improved means or apparatus for opening and closing the passage through cylinders, applicable to fire-arms of every description. (*Communicated by François Felix Challeton de Breughat.*)	326	6th Feb. 1867	John Box.
An improved steam roller, also applicable as a traction engine and portable engine.	347	7th Feb. 1867	William Thomas Carrington.
Machinery or apparatus for boring and planing metals. (*steam-engine cylinders.*)	361	8th Feb. 1867	Henry Allason Fletcher.
Machinery for sizing, dressing and beaming yarn and thread - - - - - (*constructing warp beams.*)	368	9th Feb. 1867	Richard Haworth. John Wellington Welch.
Rollers for wringing and mangling - -	421	15th Feb. 1867	William John Knowles. John Edward Wilding.
Rag engines - - - - - (*construction of rolls.*)	482	22nd Feb. 1867	James Roger Crompton.
Steam and gas engines - - - - (*Communicated by Charles E. Emery.*)	571	28th Feb. 1867	Alfred Vincent Newton.
Manufacture of metallic rollers used in preparing or treating cotton and other fibrous substances.	666	8th March 1867	Joshua Horton the younger.
Machines for "grinding" or tearing up rags and other fibrous substances.	714	12th March 1867	William Wood.
Rollers for rolling land - - - -	725	13th March 1867	George Rumbelow. Henry Kendall.
Improvements in steam fire-engines and boilers, such improvements being applicable to other purposes.	772	16th March 1867	James Shand.
Process of and apparatus for cleaning waste and other substances, and preventing the adhesion of sediment in steam-boilers and pipes. (*lubricating cylinders.*)	774	18th March 1867	John Smith.
Steam road rollers - - - -	796	19th March 1867	Thomas Aveling.
Apparatus for driving revolving retorts and cylinders.	802	20th March 1867	Paul Thomas Goodwin.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CYLINDERS, &c.—*continued.*			
Machinery for seeding, breaking, drying, washing, bleaching, softening, combing, brushing and hackling flax, hemp, jute, China grass, New Zealand flax, Esparto and other fibres, for spinning and paper stuff. (*centrifugal action cylinder.*)	841	22nd March 1867	John Spencer.
Improved apparatus for manufacturing and assorting semolina, and reducing the same to flour.	917	28th March 1867	Gustav Adolph Buchholz.
Certain new and useful improvements in paper machinery. (*rolls.*)	971	1st April 1867	Francis Curtis.
Looms for weaving - - - - (*take up rollers.*)	991	3rd April 1867	James Whitehurst. Thomas Walsh.
Revolving breech-loading fire-arms - - (*Communicated by William Herrick.*)	1007	3rd April 1867	William Robert Lake.
Machinery for picking and ginning cotton - - (*Communicated by Enoch Osgood.*)	1068	10th April 1867	Alfred Vincent Newton.
Improvements in fire-bars, and in the manufacture of the iron to be used in the construction thereof, the iron so manufactured being applicable also to other purposes. (*applicable to engine cylinders.*)	1070	10th April 1867	William Colborne Cambridge.
Machinery for grinding and polishing metal and other surfaces. (*pressure rollers.*)	1105	13th April 1867	William Gregory.
Improvements in the treatment of fibrous materials and in apparatus to be used in such treatment. (*glass or enamel milling rollers.*)	1207	26th April 1867	John Watson Burton.
Coverings for rollers of machines which are required to be smooth and elastic - -	1219	27th April 1867	Joseph Moseley. Charles Moseley.
An improved system of tenders for locomotives - (*self-acting lubricators for cylinders.*)	1347	7th May 1867	George Krauss.
Improvements in boring gun barrels and ordnance, and in apparatus used therein. (*Communicated by Joseph Jaspard.*)	1400	11th May 1867	John Piddington.
Intaglio plate printing machinery - - -	1447	16th May 1867	James Murdoch Napier.
Treating iron to obtain metallic compounds for various uses. (*for shot cylinders.*)	1461	17th May 1867	Andrew Linmere Dowie.
Improvements in steam rollers for rolling roads, and in pitch chains for working the same and for other purposes.	1500	20th May 1867	David Thomson.
Machinery for folding sheets of paper or other fabric or material. (*elastic rollers.*)	1502	21st May 1867	Joseph Davies.
Typographic printing machines - - - (*inking rollers.*) (*Communicated by Auguste Hippolyte Marinoni.*)	1534	23rd May 1867	Alexander Melville Clark.
Improvements in the production of motive-power and in the apparatus connected therewith. (*lubricating the cylinder.*) (*Communicated by Jacques Belou.*)	1575	28th May 1867	Henri Adrien Bonneville.
Manufacture of gun-barrels - - -	1687	8th June 1867	Francesco Glisenti.
An improvement in rollers used in frames for drawing and spinning or preparing fibrous materials.	1726	12th June 1867	Frederick Dunch Frost.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CYLINDERS, &c.—*continued.*			
Cotton gins - - - - - - (*feed rolls.*) (*Communicated by Charles Spofford and Charles Henry Hersey.*)	1864	26th June 1867	William Robert Lake.
Apparatus for the manufacture of iced beverages - (*soda water cylinders.*) (*Communicated by Gustave D. Dows, Adolphe Clarck and Abraham Van Winkle.*)	1875	27th June 1867	William Edward Newton.
Improvements in the manufacture of cylindrical metallic cases and in the machinery or apparatus employed therefor - - - - -	2033	11th July 1867	John Sharp Henderson. John Macintosh.
Apparatus for reefing and furling ships' square sails. (*making sail rollers.*)	2066	13th July 1867	Henry Duke.
Improvements in the lateral action or induction of fluids, and in the apparatus or mechanism employed therefor.	2106	18th July 1867	Alexander Morton.
Carding-engines - - - - -	2112	18th July 1867	Ralph Thomas Bradbury. Thomas Bottomley.
Improvements in the construction of elastic rollers for squeezing yarns and fabrics, and for other purposes - - - - - -	2174	27th July 1867	John Smith. William Schofield.
An improvement in rollers used in machinery for doubling cotton and other fibrous material -	2202	30th July 1867	James Haworth. Edwin Hamer.
Machinery and apparatus for cleaning and preparing fibrous substances, and for opening twisted yarns and woven fabrics.	2219	1st Aug. 1867	Francis Alton Calvert.
Forming shafts, rollers, drums and wheels with india-rubber surfaces.	2232	2nd Aug. 1867	John Poole.
Combined gas and air engines - - - (*Communicated by Eugen Langen and Auguste Nicoll Otto.*)	2245	3rd Aug. 1867	Charles Denton Abel.
Apparatus for preparing moulds for the casting of pipes, cylinders, pillars, rollers and other forms - - - - - -	2286	8th Aug. 1867	Charles Benson. Joseph Barker.
Printing presses - - - - - (*Communicated by Edwin Allen.*)	2290	8th Aug. 1867	William Robert Lake.
Construction of machines for splitting or for splitting and cutting sarsaparilla and other woody or vegetable fibrous substances. (*Communicated by Monsieur Gruvel, fils.*)	2310	12th Aug. 1867	Erembert Courtin.
Certain improvements in metallic packing to be employed for the "glands" and "stuffing boxes" of valves or cylinders used for steam or liquid.	2419	23rd Aug. 1867	William Shorrock Ashton.
Construction of stuffing-boxes, slide valves and steam jacketings.	2556	10th Sept. 1867	John Jordan.
Machinery for rolling hoops, strips, angle bars and other bars of iron and steel.	2588	12th Sept. 1867	William Brown.
Improvements in machinery or apparatus for cutting or working rocks and other hard substances, chiefly designed for mining, tunnelling and other like operations. (*Communicated by Herman Haupt.*)	2607	16th Sept. 1867	James Asbury McKean.
An improved map, blind, scene and picture roller -	2631	19th Sept. 1867	Philip Porter.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CYLINDERS, &c.—*continued.*			
Improvements in washing rollers and blankets used by printers, and in the machinery or apparatus employed therefor.	2667	21st Sept. 1867	Thomas Muir.
Improvements in the construction of air cylinders of blast engines, and in the valve arrangements for the same. (*Communicated by Franz Stichler.*)	2682	23rd Sept. 1867	Louis Rudolph Bodmer.
Construction and working of back rollers, carriers and carriages in drawing, roving and spinning machinery for wool, hair, silk, flax and other fibrous substances - - - - -	2767	2nd Oct. 1867	William Smith. Samuel Smith.
Machinery for the manufacture of nails and spikes - (*feeding and excentric rolls.*)	2788	3rd Oct. 1867	George Mellor.
Improvements in the construction of railways and railway carriages, and in the means for propelling the said carriages. (*antifriction rollers, drums, &c.*) (*Communicated by Charles Thompson Harvey.*)	2896	15th Oct. 1867	William Robert Lake.
Rollers used in frames for drawing and spinning or preparing fibrous materials.	2901	16th Oct. 1867	Frederick Dunch Frost.
Improvements in locomotive engines, vehicles and appendages thereto, for better and safer working on railways, tramways and common roads. (*lubricating cylinders.*)	2907	17th Oct. 1867	William Bridges Adams.
Machinery for decorticating or hulling rice and other grain - - - - -	2916	17th Oct. 1867	Thomas Bell. John Richardson.
Construction of rollers for window-blinds - -	3002	25th Oct. 1867	Lawrence Stockman.
Centrifugal machines for separating liquid from solid matter. (*construction of the cylinder.*) (*Communicated by David M^cColley Weston.*)	3041	28th Oct. 1867	William Robert Lake.
Machinery for polishing cylinders - - -	3126	6th Nov. 1867	Robert Leake. Joseph Beckett.
Manufacture of flexible air-tight cylinders or cases to be used as pontoons and in forming rafts.	3175	9th Nov. 1867	George Frederick Parratt.
Printing rollers used for printing colours on hanks of yarns or threads - - - - -	3210	13th Nov. 1867	Frederick Andrew. Ellis Whittaker.
Improvements in rotary engines applicable as motors, pumps, meters and for other purposes, also in indicators applicable to such and other engines or meters and other purposes. (*Communicated by Arthur Perry Emery.*)	3219	13th Nov. 1867	Alfred Vincent Newton.
Kneading-machines - - - - - (*Communicated by George King.*)	3224	14th March 1867	George Kent.
Apparatus for applying bronze and other powders on paper and other surfaces. (*Communicated by Jacques Laurent Poirier.*)	3229	14th Nov. 1867	Alexander Melville Clark.
Machines for printing calico and other fabrics - (*forming wiping rollers.*)	3257	16th Nov. 1867	James Murdoch Napier.
An improved method of conveying rotatory motion to axles. (*hollow drums.*)	3271	18th Nov. 1867	Kenelm John Winslow.
Packing for the piston heads of steam cylinders - (*Communicated by Horace M^cMurtrie.*)	3293	21st Nov. 1867	William Robert Lake.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
CYLINDERS, &c.—*continued.*			
Improvements in machinery for boring rocks, and in apparatus for driving rock-boring, tunnelling, coal-cutting and other machinery employed in mines, collieries and quarries - (*boring cylinder.*)	3386	29th Nov. 1867	Thomas Brown Jordan. John Darlington.
Steam cylinders and the peculiar arrangement of the mechanism connected therewith.	3530	12th Dec. 1867	Noah Paxman, jun^{r}.
Machinery for softening jute, hemp and similar fibrous materials - - - - -	3643	23rd Dec. 1867	William Walton Urquhart. Joseph Lindsay.
Metallic pistons for steam cylinders, air cylinders or pumps.	3685	28th Dec. 1867	Jacob Goodfellow.
Thread-polishing machines - - - - (*forming the rollers.*)	3710	31st Dec. 1867	Gilbert M^{c}Culloch.
DENTISTRY; ARTIFICIAL TEETH, TOOTH-PICKS.			
Atmospheric plates of artificial teeth - -	286	1st Feb. 1867	Nehemiah Taylor Folsom.
Improvements in baking or hardening vulcanite or dental india-rubber and other similar compounds and preparations, and in apparatus employed for such purpose.	688	11th March 1867	Frederick Ryding.
A new and improved means of utilizing all the parts of all sorts of feathers. (*for tooth-picks.*) (*Communicated by Jean Louis Frèdèric Bardin.*)	2247	3rd Aug. 1867	Charles Touaillon, junior.
Improvements in the construction of moulds for casting aluminium and other metal plates for artificial teeth, also in the method of casting said plates and securing the teeth therein, and in apparatus connected therewith, part of which improvements is applicable for producing other fine metal castings. (*Communicated by James Baxter Bean.*)	2368	17th Aug. 1867	Alexander Melville Clark.
Treatment of cotton and other fibrous materials used in dentistry. (*dental plates, filling, &c.*) (*Communicated by John Alexander McClelland.*)	2785	3rd Oct. 1867	Alexander Melville Clark.
Chairs for the use of dentists, barbers, photographers or other persons, such invention also being applicable to other useful purposes.	2915	17th Oct. 1867	Otis Converse White.
Improvements in holders for lead and other marking materials, part of which improvements is also applicable as holders for other articles. (*holders for tooth-picks.*)	3015	26th Oct. 1867	William Edward Wiley.
Improvements in the construction of operating chairs more especially designed for dentists, parts of such improvements being applicable for other purposes.	3484	7th Dec. 1867	James Beall Morrison.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
DENTISTRY, &c.—*continued.*			
Treatment of gutta-percha, indian-rubber, Honduras gum, and the other allied gums, for the production of a preparation or preparations applicable as a varnish, cement, paint, stain, water and air proof material, solid or elastic material and for other purposes. (*for dentistry.*) (*Communicated by Daniel Reed.*)	3542	13th Dec. 1867	Edward Reed Sintzenich.
DISINFECTING, DEODORIZING, PERFUMING.			
An improved mode of and apparatus for purifying the impure waters emanating from sugar factories and other industrial establishments, applicable also to the purification of sewage water.	119	17th Jan. 1867	Ernst Süvern.
Improvements in apparatus applicable to dry closets, for disinfecting and deodorising and preparing manure, parts of which are applicable to the separating of cinders from ashes.	729	13th March 1867	James Conyers Morrell.
An improved process for manufacturing ice and for other refrigerating purposes. (*for disinfecting.*) (*Communicated by Thaddeus Sobeski Carlincourt Lowe.*)	952	30th March 1867	William Edward Newton.
A new and improved kind of soap - - - (*anti-putrid.*) (*Communicated by Emeric de Werchin.*)	1046	8th April 1867	Henri Adrien Bonneville.
Improved apparatus for generating and distributing vapour.	1188	24th April 1867	Charles Frederick Whateley.
Disinfection and treatment of fecal and other matters for the manufacture of manure. (*Communicated by Louis Verstraet.*)	1229	27th April 1867	Emile Guenin.
Vessels more particularly such as are used for the reception or deposit, or both, of offal, excrement, urine or other fecal or waste matter or substances. (*Communicated by Andrew Rankin.*)	1710	11th June 1867	Henri Adrien Bonneville.
Apparatus for diffusing odours or perfumes -	2478	31st Aug. 1867	William Aubert.
A liquid or composition (of a deodorizing nature) mixed with water, whereby roads, streets and other places are kept moist and free from dust, for several days after once watering - - -	2482	2nd Sept. 1867	Henry Octavius William Cooper. Elizabeth Foster Cooper.
An improved process and apparatus for instantaneously disinfecting fecal and manuring matters, improving the same, and also rendering them fit for feeding domestic animals. (*Communicated by Louis Jean Baptiste Alphonse Lemoine and Antoine Marius Turrel.*)	2549	9th Sept. 1867	Frederick Tolhausen.
Improvements in treating sewage or other liquid matters so as to purify the more fluid portions thereof, and recover some of the contained matters for re-use in manufacturing processes, and in the preparation of others for use as manures (*deodorising and disinfecting.*)	2894	15th Oct. 1867	Thomas Henry Baker. Thomas Woodroffe.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
DISINFECTING, &c.—*continued.*			
Improvements in apparatus for supplying deodorizing matter to dry or earth closets, and in processes of and apparatus for treating the liquid portion of human or animal excreta after removal from such closets or from other receptacles.	2918	17th Oct. 1867	James Bannehr.
Manufacture of manures and disinfectants -	2984	24th Oct. 1867	Fredrich Gerhartz.
Improvements in and in apparatus for the treatment and for the reception of urine and fœcal matter. (*deodorized manure.*)	2998	24th Oct. 1867	Robert Weare.
Improved modes of and means for curing, drying, preserving and packing meat, fruit, vegetables and other perishable substances. (*Communicated by Daniel E. Somes.*)	3006	25th Oct. 1867	William Robert Lake.
DISTILLING AND RECTIFYING.			
I.—Alcoholic Distillation, Manufacture of Spirituous Liquors.			
Machinery or apparatus for refrigerating purposes, used in breweries and distilleries.	787	19th March 1867	Francis Gregory.
Improvements in applying and fitting the tubes of multitubular boilers, condensers and other like capacities, and in apparatus for the same. (*Communicated by Victor Langlois.*)	988	2nd April 1867	William Clark.
Manufacture of alcohol and other spirits - -	1288	2nd May 1867	John Fletcher Collins.
Drying malt and also brewers' and distillers' grains and spent hops.	1485	18th May 1867	James Lee Norton.
Machinery or apparatus for separating liquids or moisture from substances, and also for revivifying and cooling animal charcoal and other substances, and for treating sugar. (*treating distillers' wash.*)	1605	30th May 1867	William Orr.
Improvements in machinery or apparatus for separating liquids or moisture from substances, and also for revivifying and cooling animal charcoal, and other substances, and for treating sugar. (*distillers' wash.*)	1707	10th June 1867	William Orr.
Processes of and apparatus for the rectification and purification of alcohol. (*Communicated by Jean Gustave Béquet and Hugues Champonnois.*)	2011	9th July 1867	William Edward Newton.
Improvements in refrigerators for cooling worts and other liquids, which improvements are also applicable to condensers used in distillation -	2031	11th July 1867	Joseph Stirk. Horatio Bycroft.
Apparatus for drying grain, seeds, malt, spent hops, brewers' and distillers' grains, hops, wool, rags and other materials.	2071	13th July 1867	James Lee Norton.
Cooling or refrigerating water - - -	2944	19th Oct. 1867	John Schwartz.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
DISTILLING, &c.—*continued.*			
An improved mode of and apparatus for exhausting or rarefying the air in vessels for food-preserving, distilling and other purposes. (*Communicated by James Gordon and John Archbald.*)	3069	31st Oct. 1867	William Robert Lake.
Apparatus for distilling, heating, evaporating and cooling liquids.	3148	7th Nov. 1867	John Frederick Brinjes.
Process and apparatus employed for ageing and refining wines, alcoholic spirits and other liquors. (*Communicated by Reuben Daniel Turner.*)	3260	16th Nov. 1867	John Garrett Tongue.
For distilling water, *see* "FILTERING."			
II.—Bituminous, Resinous and Oleaginous Distillation.			
Improvements in the treatment of the residual matters resulting from and obtained in the purification and distillation of mineral or hydrocarbon oils, and also in the treatment of coal tar and various waste or other alkaline and lime substances, for the purpose of utilizing the same.	211	26th Jan. 1867	John James Lundy.
Improvements in effecting the distillation of coal, shale, wood, peat and other bituminous or carbonaceous substances - - - -	284	1st Feb. 1867	Jacob Buhrer. Astley Paston Price.
Distillation of bituminous substances - -	650	7th March 1867	William Young. Peter Brash.
Improvements in machinery or apparatus for the manufacture and reburning of animal charcoal, and for distilling shale and other like substances.	707	12th March 1867	John Frederick Brinjes.
Stills for petroleum, parraffine oil, tar, turpentine and like bodies.	1808	21st June 1867	John William Perkins.
Utilization of a certain waste material obtained in the manufacture of hydrocarbon liquids.	1888	28th June 1867	John Carrington Sellars.
Improvements in the mode of distilling or separating the more volatile portions of petroleum and other mineral oils, and in means or apparatus for ascertaining the igniting and explosive point of such oils.	2175	27th July 1867	Edward Alexander Rippingille.
Improvements in the treatment and application of the residuum which results from the clarification and purification of cotton seed oil and other vegetable drying oils, and of the residuum which results from the distillation or other analogous treatment of the said material, for the manufacture and preparation of isolating preservative and anti-corrosive compositions.	2656	21st Sept. 1867	Giacomo Eduardo Marchisio.
Apparatus for separating soluble from insoluble matters, filtering the solutions, and if wished distilling these latter or parts of them.	2863	11th Oct. 1867	Eduard Leitenberger.
Improvements in the treatment of hydrocarbons for the production of gas sufficiently permanent to be stored for lighting and heating purposes, and especially in the treatment of the hydrocarbons and other products obtained by distilling or carbonizing coal, wood and other carbonaceous materials, including those obtained in the manufacture of gas and in the distillation of coal tar.	2893	15th Oct. 1867	Adam Aitchison.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
DISTILLING, &c.—*continued.*			
Improvements in the mode of and apparatus for burning the gases arising from the distillation of liquid hydrocarbons, and also in economizing fuel by the said process - - - -	3014	26th Oct. 1867	George Dorsett. Edward Dorsett. John Bennington Blythe.
Apparatus for distilling, heating, evaporating and cooling liquids.	3148	7th Nov. 1867	John Frederick Brinjes.
Apparatus for burning and distilling petroleum and other oils, to generate steam, and for other purposes. (*Communicated by Adam Robertson and Ananias Smith.*)	3183	11th Nov. 1867	Clinton Edgcumbe Brooman.
Mode of and apparatus for the reduction of sulphate of iron crystals. (*Partly communicated by Charles Madge.*) *See also* "GAS."	3217	13th Nov. 1867	Edward Madge.
DOCKS, HARBOURS, BREAKWATERS, PIERS, LANDING-STAGES, CANALS, SEA-WALLS, SUBMARINE WORKS, WEIRS.			
Improved machinery for pocketing hops, for puddling dams, for punning at back of long retaining walls, river or sea embankment facings and such like works.	57	9th Jan. 1867	Richard Winder.
Improvements in the mode of and apparatus for manufacturing beton, and in the method of applying beton for certain constructive or structural purposes. (*for piers, dikes, &c.*) (*Communicated by François Coignet.*)	77	11th Jan. 1867	Michael Henry.
Improvements in constructing quays, jetties, piers, sea walls and breakwaters, in the formation of reservoirs, docks, basins, coast harbours, harbours of refuge, lighthouses and sea batteries, applicable also for the reclamation of land and for the building of bridges.	79	11th Jan. 1867	Henry Buss.
Breaks and apparatus for giving motion to machinery. (*screwing down piles for piers.*)	299	2nd Feb. 1867	Robert David Napier.
Improved means for raising sand or shingle covered by the tide to the level of high water, and therewith forming embankments for the construction of sea works. (*breakwaters.*)	387	12th Feb. 1867	Edward Manico.
Machinery and apparatus for moving mud, sewage, sand, small gravel or other similar matter, from one place to another. (*in forming docks.*) (*Communicated by James Burt.*)	702	12th March 1867	Thomas Burt.
Improvements in the construction of sea-walls, quays, jetties, piers and roadways, in the reclamation of land, in the formation of docks, reservoirs, basins and coast-harbours.	1018	5th April 1867	Henry Buss.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
Docks, &c.—*continued.*			
An improved machine for cutting scale-board, and for the manufacture of the scale-board or material cut by said machine into an improved fabric for structures generally. (*for dry docks, canal locks, &c.*) (*Communicated by John Kinney Mayo.*)	1051	8th April 1867	William Clark.
Improvements in the construction of landing stages and iron ships or vessels, also in propelling and steering ships or vessels generally.	1309	4th May 1867	Evan Leigh.
Manufacture of artificial granite and other artificial bricks and blocks suitable for buildings, engineering structures, pavements and other similar purposes. (*for docks.*) (*Communicated by Pierre Rodolphe Pozzi.*)	1458	17th May 1867	Perceval Moses Parsons.
Improvements in the construction of a steam vessel suitable for ferrying laden trains across the ocean, complete, together with its landing-places, breakwaters, and modes of protection from marine insects and fouling, which improvements are also generally applicable to other vessels, and to the protection of iron and wood exposed to the action of the sea water.	1503	21st May 1867	Edward Henry Cradock Monckton.
An improved machine or plough for clearing or grubbing up uncultivated land. (*or making cuttings for canals.*)	1573	28th May 1867	Florent Joseph Vandenvinne.
Improvements in compositions for preventing the fouling of the bottoms of ships, floating docks and other similar structures, and in the mode or means of applying the said compositions.	1924	2nd July 1867	George Augustus Frederick Fowke.
Mode of applying metal sheathing to iron ships, caissons and floating docks, and other iron constructions subject to corrosion.	1961	4th July 1867	William Day.
A new or improved composition for coating ships and other vessels and submerged structures.	2012	9th July 1867	Robert Smith.
Construction of sub-aqueous works and foundations	2039	11th July 1867	John Smith Burke. Benjamin Burleigh.
Apparatus for submarine exploration - - (*Communicated by George Wrightson.*)	2466	29th Aug. 1867	Alexander Melville Clark.
Improved methods of constructing steam generators for engines, new furnaces connected therewith, and the mode of working them, with machinery in combination with the uses to which they are applicable. (*storage tanks for docks.*)	2792	4th Oct. 1867	Henry Pinkus.
Bridges, piers and landing stages - -	2886	14th Oct. 1867	Henry Nathan Maynard.
Compositions for coating the bottoms of iron, steel and wooden ships and other navigable vessels, and marine works generally.	3028	28th Oct. 1867	Joseph de Silva.
Improvements in the construction of buildings, arches, coffer-dams, wharf walls and such like structures, and in the floors and roofs of buildings, and floors in other situations - -	3080	2nd Nov. 1867	Samuel Parr. Alfred Strong.
Manufacture of artificial granite suitable for buildings, engineering structures, pavements and other similar purposes. (*for docks.*) (*Communicated by Pierre Rudolph Pozzi.*)	3234	15th Nov. 1867	Perceval Moses Parsons.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
Docks, &c.—*continued.*			
Improvements in apparatus for rendering innocuous the momentum of heavy bodies so as to prevent injury and damage from concussion, applicable to ships' cables, cranes, windlasses, capstans, hoists, lifts, weighing machines, ship and fort armour, to training guns, to railway trains, station buffers, fenders to pier-heads, gang-ways, breakwaters and other similar structures, which apparatus is also applicable for storing and accumulating power, which may be used for throwing projectiles, raising or moving heavy weights, such as ships, stranded or sunken vessels, propelling carriages and other purposes.	3302	21st Nov. 1867	William Graham McIvor.
Construction or arrangement of piles or fagots for wrought-iron beams, girders or bars of different forms. (*for piers.*) (*Communicated by George Walters and Thomas Shaffer.*)	3355	27th Nov. 1867	John Henry Johnson.
Caissons - - - - -	3526	12th Dec. 1867	Jonathan Robert Baillie.
Doors and Gates; Door Furniture.			
An improved apparatus for preventing wind-draughts and water from passing under doors, casements and similar places.	81	12th Jan. 1867	John Hoadly.
Machinery or apparatus for opening, closing, locking and unlocking cart and other gates on railway level crossings, together with signals in connection therewith.	369	9th Feb. 1867	George Daws.
Improvements in iron safes and for doors for the same and other purposes - - -	400	13th Feb. 1867	Joseph Westwood. Robert Baillie.
Improvements in opening, closing and securing windows, doors and shutters, which improvements are also applicable to the opening, closing and securing the port holes of ships, and in the machinery or apparatus employed therein.	432	16th Feb. 1867	James Carter.
Means or apparatus employed to secure coal plates, trap doors and other similar articles.	436	16th Feb. 1867	Ebenezer Stevens.
An improved mode or manner of securing door and other knobs to their spindles.	553	28th Feb. 1867	Thomas Hyatt.
Connecting door and other knobs to their spindles	691	11th March 1867	Joseph Beverley Fenby.
Improvements in the manufacture of hat and coat hooks, and in attaching knobs and ornaments to various articles. (*to doors.*)	710	12th March 1867	James Alfred Fussell.
Securing door and other knobs to their spindles -	804	20th March 1867	Thomas Kemp Mace.
Construction of fences, hurdles and gates - -	831	22nd March 1867	Peter Dickenson.
Improvements in iron and wire continuous fencing, and in the lapping machinery employed therein, and in the manufacture of guards and other descriptions of wire-work. (*wrought iron gates.*)	874	26th March 1867	Edward Owen Greening.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
Doors, &c.—*continued.*			
Manufacture of iron outside venetian blinds (*and doors.*)	889	27th March 1867	Jean Marie Jomain.
Coverings for internal walls and surfaces (*veneers for doors.*)	983	2nd April 1867	Jost Hahler.
Spring centres for doors and other purposes	1043	6th April 1867	James Barker.
An improved spring for doors and other purposes	1062	9th April 1867	Francis Waller.
Improvements in securing the handles of doors and in the means employed therefor.	1352	7th May 1867	James Crockatt.
Improvements in the manufacture or construction of gates and fences, part of which invention is applicable to straining wires and to other straining purposes	1667	6th June 1867	George Rich Turner. William Thomas Allen.
Improvements in securing and adjusting windows, blinds and shades, doors and shutters, and in the apparatus employed therefor.	1708	10th June 1867	Robert Logan.
Improvements in the construction and manufacture of iron or metal rail rods or bars for balconies, gates, railings, pillars, standards or columns and other useful purposes, and also in the machinery employed therein.	1739	14th June 1867	Stephen Tuddenham.
Closing of doors, windows and other such apertures with a spring, when necessary to close them by such means.	1790	19th June 1867	John Coppard.
Adjustable appliances for fixing door handles	1902	29th June 1867	Archibald Hodge.
Doors and windows and fastenings for the same	2041	12th July 1867	Robert Alexander Kennedy.
Means of indicating numbers and names on doors of private houses	2062	13th July 1867	William Drury. Charles Westrup.
Fastenings for window-sashes, casements, shutters, doors, port-hole lights and other similar objects.	2116	19th July 1867	John Rogers.
Supporting window sashes, shutters, doors and other similar structures.	2712	26th Sept. 1867	James Syme.
Railway and other carriages and various parts of the same. (*carriage doors.*)	2796	4th Oct. 1867	Joseph Offord.
Improvements in fastening and strengthening gates and in the means employed therefor.	3083	2nd Nov. 1867	William Darcey.
Improved means for closing doors or windows	3111	5th Nov. 1867	Antoine Verdalle.
Construction of panel doors and frames	3121	5th Nov. 1867	William Geeves.
Details and fittings of windows, doors and other similar contrivances applied to buildings and other structures	3206	12th Nov. 1867	James Carter. Thomas Chalmers.
An improved spring hinge (*for doors.*) (*Communicated by Jehiel Keeler Hoyt.*)	3364	27th Nov. 1867	William Robert Lake.
Certain improvements in springs to be applied to doors and for similar purposes.	3496	9th Dec. 1867	William Henry Cooke.
Door bolts and indicators	3550	13th Dec. 1867	John Grundy Settle.
Certain improvements in the manufacture and construction of carriages landaus and other similar vehicles.	3600	18th Dec. 1867	Joseph Cockshoot, junior.
Butt hinges (*Communicated by Benjamin Franklin Barker.*)	3689	28th Dec. 1867	William Edward Newton.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
DRAINS, SEWERS, GUTTERS; DRAIN PIPES AND TILES; DRAINING; STENCH TRAPS, SINKS.			
Iron channels, tramways and pavements -	205	26th Jan. 1867	Stephen Carey.
Improvements in the lighting of mines, sewers and other similar subterraneous places in which inflammable and explosive gases may form and collect, and in the lamps or lanterns and other apparatus to be used therewith.	252	30th Jan. 1867	Henry Richardson Fanshawe.
Construction and arrangement of kilns and ovens - (*for sewer tubes.*)	290	2nd Feb. 1867	John Gilbert Robinson.
Street gutters and sinks - - -	417	14th Feb. 1867	George William Wright.
An improved means of draining mines, coal pits and other places from whence it is desired to raise water.	860	25th March 1867	William Matthews.
Apparatus for the manufacture of bricks, tiles and other articles of plastic material. (*drain pipes.*) (*Communicated by Frederick Hertel.*)	954	30th March 1867	William Clark.
Fittings for stables, harness rooms and cow houses (*surface drainage.*)	993	3rd April 1867	James Musgrave.
An improved combined lift and force pump - (*for ships and mines.*)	1026	5th April 1867	Stephen Matthews.
An improved machine for cutting scale-board, and for the manufacture of the scale-board or material cut by said machine into an improved fabric for structures generally. (*for drains, sewers, &c.*) (*Communicated by John Kinney Mayo.*)	1051	8th April 1867	William Clark.
Machinery for actuating tools used in mining or excavating or boring, part of the improved machinery being also applicable for actuating mine or other pumps.	1123	16th April 1867	George Simpson.
Improvements in waterclosets and sinks, and in apparatus for supplying water thereto and conducting it therefrom, parts of which apparatus are applicable to other purposes.	1426	14th May 1867	Josiah George Jennings.
An improved combination of materials to be used in the manufacture of "drain bottoms," flue slabs, bricks and other like purposes.	1732	13th June 1867	John Holmes.
Improvements in buckets for pumps, especially suitable for pumps for mines, and in pistons for steam and other engines.	1821	21st June 1867	Francis Reddicliffe.
Machinery or apparatus for raising and forcing water and other fluids - - - (*draining mines, discharging bilge water.*)	1828	22nd June 1867	Thomas Wilson. William Hall.
Construction and manufacture of traps for waterclosets, drains and other purposes.	2253	3rd Aug. 1867	George White Dinsdale.
An improved mode of and apparatus for hauling draining and other agricultural implements in the field, by steam power, and also an improved truck for mounting and carrying such implements from place to place.	2426	24th Aug. 1867	John Phillips-Smith.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
DRAINS, &c.—*continued.*			
Improvements in the construction of railways and railway carriages, and in the means for propelling the said carriages. (*gutters on carriage roofs.*) (*Communicated by Charles Thompson Harvey.*)	2896	15th Oct. 1867	William Robert Lake.
Means and apparatus or implements employed for distributing sewage over land. (*covered trenches.*)	2898	16th Oct. 1867	Baldwin Latham.
Machinery for excavating, raising and depositing soil. (*cutting trenches to receive drain tiles.*)	3049	29th Oct. 1867	William Peacock Savage.
Excavating machines more especially designed for making ditches and drains. (*Communicated by Henry Charles Ingraham.*)	3500	9th Dec. 1867	William Robert Lake.
Machines for making drains or trenches - -	3583	17th Dec. 1867	Thomas Volkert Mackintosh.
DRAMATIC AND SCENIC EFFECTS, ILLUSORY EXHIBITIONS, STAGE SCENERY, FLOAT LIGHTS.			
An improved mode of and means for producing optical illusions. (*Communicated by Milton Bradley.*)	629	6th March 1867	Henry Watson Hallett.
An improved map, blind, scene and picture roller -	2631	19th Sept. 1867	Philip Porter.
A revolving apparatus for exhibiting figures and other objects in apparent motion - - (*Communicated by William W. Rose.*)	3156	8th Nov. 1867	Henry Jewitt.
Improved means of producing illusory exhibitions (*Communicated by Fredk Aschenbach.*)	3297	21st Nov. 1867	Samuel Barczinsky. Bernhard Barczinsky.
An improved curtain or screen for separating the stage from the audience part in theatres and music halls, in order to prevent the spreading of fire, also applicable to other buildings where it is desired to prevent the spreading of fire from one part of the building to another part.	3523	12th Dec. 1867	George Adam Young.
Apparatus used in producing scenic illusions -	3541	12th Dec. 1867	John Henry Pepper. Thomas William Tobin.
An invention for the purpose of producing an optical illusion of apparently beheading or otherwise dismembering a human being.	3617	19th Dec. 1867	Joseph Simmons.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
DRYING, EXPRESSING MOISTURE.			
Improved apparatus for regulating, controlling and for varying the speed of shafts and machinery. (*drying machines, hydro-extractors.*)	51	8th Jan. 1867	Robert Robinson.
Improvements in pipe moulding and casting apparatus, and in black washing the moulds. (*mould drying.*) (*Communicated by George Ross.*)	99	14th Jan. 1867	William Clark.
Apparatus for drying yarn - - - (*Communicated by Hugh Whitehill.*)	324	5th Feb. 1867	John Garrett Tongue.
An improved construction of tentering machine - (*for drying fabrics.*)	398	12th Feb. 1867	William Clissold.
Preparation of threads and the manufacture of fabrics from the threads so prepared. (*preparing for drying.*) (*Communicated by Stanislas Vigoureux.*)	509	23rd Feb. 1867	Clinton Edgcumbe Brooman.
Means and apparatus for drying hops - -	520	26th Feb. 1867	William Henry Samson.
Improvements in apparatus for expressing or extracting liquids from substances containing the same, and in the manufacture of a fabric employed therein. (*Communicated by Theodore Poizot and Alphonse Druelle.*)	531	26th Feb. 1867	Clinton Edgcumbe Brooman.
Ovens and kilns for drying and burning bricks and other articles.	562	28th Feb. 1867	Jacob Buhrer.
Filtering presses for expressing the liquid parts and retaining the solid parts of any semi-liquid substances. (*Communicated by Pierre Du Rieux and Edouard Roettger.*)	587	2nd March 1867	Edward Thomas Hughes.
Mode of regulating the speed of drying cylinders or rollers employed by dyers, scourers and bleachers.	674	9th March 1867	Auguste Rupp.
Improvements in drying threads and fabrics, and in combining apparatus for that purpose. (*Communicated by Léon Jarosson and Albert Bastaert.*)	698	11th March 1867	William Clark.
Improvements in apparatus applicable to dry closets, for disinfecting and deodorizing and preparing manure, parts of which are applicable to the separating of cinders from ashes. (*drying floors.*)	729	13th March 1867	James Conyers Morrell.
Machinery for seeding, breaking, drying, washing, bleaching, softening, combing, brushing and hackling flax, hemp, jute, China grass, New Zealand flax, Esparto and other fibres for spinning and paper stuff.	841	22nd March 1867	John Spencer.
Improvements in the manufacture of manure and in apparatus for the same. (*Communicated by Jean Georges Lucien Renard.*)	933	29th March 1867	William Clark.
Blast furnaces or cupolas - - - - (*and drying ironstone.*)	944	30th March 1867	Thomas Prideaux.
Centrifugal sugar machines - - - (*Communicated by Alexander Mackey and Eberhard Müller.*)	980	2nd April 1867	William Edward Newton.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
DRYING, &c.—*continued.*			
An improved feeder or hopper for centrifugal sugar machines. (*Communicated by Helem Merrill.*)	1177	23rd April 1867	William Robert Lake.
Improved means and apparatus for drying moist substances, or drying and burning granular substances, or evaporating liquid substances, and economizing the waste heat produced in the processes.	1195	25th April 1867	George Gordon.
Improvements in the treatment of fibrous materials and in apparatus to be used in such treatment. (*drying wools, &c.*)	1207	26th April 1867	John Watson Burton.
Drying machines - - - -	1267	1st May 1867	James Lee Norton.
Manufacture of flour - - - - (*drying.*)	1386	10th May 1867	John Norman. William Hay.
Machines for drying yarns, paper and fabrics -	1389	10th May 1867	James Johnson. Alfred Giles.
Improved arrangements and apparatus for wetting and drying wefts or yarns to prepare them for weaving - - - - - -	1431	15th May 1867	Clarance Brazil. Robert Grime.
Drying malt and also brewers' and distillers' grains and spent hops.	1485	18th May 1867	James Lee Norton.
Machinery for washing and drying wool and other materials.	1486	18th May 1867	James Lee Norton.
Improvements in furnaces for heating the air stoves of blast furnaces and for other purposes, and in utilizing the products of combustion from such stoves. (*for drying.*)	1517	22nd May 1867	Daniel Adamson.
Drying peat and other materials - -	1595	29th May 1867	William Barry Ritchie. Jacob Geoghegan Willans.
Machinery or apparatus for separating liquids or moisture from substances, and also for revivifying and cooling animal charcoal and other substances, and for treating sugar.	1605	30th May 1867	William Orr.
Construction of chambers for drying artificial fuel and other substances.	1638	3rd June 1867	David Barker.
Improvements in machinery or apparatus for separating liquids or moisture from substances, and also for revivifying and cooling animal charcoal and other substances, and for treating sugar.	1707	10th June 1867	William Orr.
Apparatus for drying or finishing garments and fabrics after cleaning or dyeing.	1743	14th June 1867	George Ker.
Improvements in the manufacture of electrical telegraphic conductors and in the means or apparatus employed therein. (*drying coated wires.*)	1772	17th June 1867	Matthew Gray.
Hot air ovens for baking bread, biscuits, pastry, cooking, drying or desiccating flour and other materials.	1853	25th June 1867	Henry Veillon.
Improved means of and apparatus for washing and drying moist substances, or drying and burning granular substances, or evaporating liquid substances, and for economizing the waste heat produced in such processes.	1930	2nd July 1867	George Gordon.
Drying wheat and other grain, and pulse and seeds, and in the apparatus employed therein - -	2023	10th July 1867	James Noah Paxman. Henry Matthews Davey.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
DRYING, &c.—*continued.*			
Apparatus for the manufacture of artificial fuel, which apparatus may also be employed for other purposes.	2065	13th July 1867	Henry Fletcher.
Apparatus for drying grain, seeds, malt, spent hops, brewers' and distillers' grains, hops, wool, rags and other materials.	2071	13th July 1867	James Lee Norton.
Improved means and apparatus for "malting" or drying barley, part of which means and apparatus is also applicable to other purposes -	2095	17th July 1867	James Schofield. Joshua Caleb Dawson.
Apparatus for supporting lines for drying clothes and for other like purposes.	2187	27th July 1867	Archibald Macfie.
Machinery and apparatus for preparing, shaping and drying peat and other vegetable and mineral substances - - - - - -	2233	2nd Aug. 1867	Frederick Ludwig. Hahn Danchell.
Presses for extracting liquid from hops, seeds and other substances.	2540	7th Sept. 1867	Hamilton Woods.
Improvements in the bearings of "hydro-extractors" and in the method of supplying lubricating matter to the same, applicable also to the lubricating of the bearings of other machinery -	2569	11th Sept. 1867	Edward Kenworthy Dutton. Sam Mason, jun^{r}.
Improvements in separating yeast from liquid matters and in apparatus to be used therefor. (*by centrifugal force.*)	2652	20th Sept. 1867	William Hall.
Improvements in the treatment and application of the residuum which results from the clarification and purification of cotton seed oil and other vegetable drying oils, and of the residuum which results from the distillation or other analogous treatment of the said material, for the manufacture and preparation of isolating preservative and anti-corrosive compositions. (*obtaining a desiccating agent.*)	2656	21st Sept. 1867	Giacomo Eduardo Marchisio.
An improved method of and apparatus for drying, cleaning and separating grain.	2659	21st Sept. 1867	John Stonehouse Williamson.
Improvements in smelting and treating iron and in blast furnaces or cupolas for such purposes. (*and drying.*)	2745	28th Sept. 1867	Thomas Prideaux.
Improvements in the treatment of mixed fabrics and the extraction of wool therefrom, and in the construction of apparatus to be used for such treatment and for other purposes.	2803	5th Oct. 1867	George Martin.
An improved apparatus for drying corn, malt or other similar substances.	2804	5th Oct. 1867	John Stonehouse Williamson.
Improved modes of and means for curing, drying, preserving and packing meat, fruit, vegetables and other perishable substances. (*Communicated by Daniel E. Somes.*)	3006	25th Oct. 1867	William Robert Lake.
Centrifugal machines for separating liquid from solid matter. (*Communicated by David M^{c}Colley Weston.*)	3041	28th Oct. 1867	William Robert Lake.
Manufacture of grindstones and other blocks or forms of artificial stone - - - (*drying by means of vacuum.*)	3193	11th Nov. 1867	Frederick Ransome. Henry Bessemer. Ernest Leslie Ransome.
New and useful machinery for making, drying and burning bricks and tiles, applicable in part to baking pottery ware.	3220	13th Nov. 1867	Peter Edward Bland.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
DRYING, &c.—*continued.*			
Apparatus for brushing, combing, cleansing, drying and perfuming hair.	3254	16th Nov. 1867	Charles Ritchie.
Improvements in machinery or apparatus for drying and stretching woven fabrics, paper or continuous lengths of other similar materials.	3401	30th Nov. 1867	Thomas Briggs, junior.
Construction of chambers for drying artificial fuel and other substances.	3420	2nd Dec. 1867	David Barker.
An improved mode of and apparatus for decorticating and drying corn and other grain.	3424	2nd Dec. 1867	Jonah Hadley.
Improvements in apparatus for training growing hops and other plants, which improvements may also be applied to line-posts and other posts or supports for various purposes - - - (*clothes lines.*)	3509	10th Dec. 1867	John Grout. Edwin Mathews.
Improvements in the treatment of fibrous materials and in apparatus used therein. (*drying wool, &c.*)	3510	10th Dec. 1867	John Watson Burton.
DYEING TEXTILE FABRICS, YARNS AND MATERIALS; FIXING COLOURS; MORDANTS.			
Tinting or colouring the surface of paper or other materials or fabrics. (*Communicated by George Streat.*)	121	17th Jan. 1867	William Edward Newton.
Treating and preparing silk - - - - (*for dyeing.*) (*Communicated by Adolphe Philippe and Gustave Fortier.*)	264	31st Jan. 1867	Clinton Edgcumbe Brooman.
Preparation of threads and the manufacture of fabrics from the threads so prepared. (*dyeing knitted fabric for future weaving.*) (*Communicated by Stanislas Vigoureux.*)	509	23rd Feb. 1867	Clinton Edgcumbe Brooman.
Certain improvements in the method of producing selvedge lines or borders on woven fabrics, and in apparatus connected therewith - - - (*in dyeing.*)	585	2nd March 1867	Samuel Frank. Richard Gooddy.
Mode of regulating the speed of drying cylinders or rollers employed by dyers, scourers and bleachers.	674	9th March 1867	Auguste Rupp.
Dyeing and printing - - - - -	743	15th March 1867	James Keymer. William Whitehead.
Dyeing carded or combed wool or hair - - (*Communicated by Arthur Talon and Edmond Solignac.*)	748	15th March 1867	John Henry Johnson.
Treatment of wool and other animal textile materials, whether in a raw or manufactured state. (*preparing for dyeing.*) (*Communicated by Jean Baptiste Frezon the elder.*)	861	25th March 1867	John Henry Johnson.
Means of colouring tobacco pipes and other articles of meerschaum and massa.	1132	17th April 1867	James Smith Brooks.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
DYEING, &C.—*continued.*			
Improvements in the treatment of fibrous materials and in apparatus to be used in such treatment. (*after dyeing.*)	1207	26th April 1867	John Watson Burton.
Certain improvements in the method and apparatus for keeping warm glues, starches, gums and other liquids, which is also applicable for keeping other articles warm. (*solutions for dyeing.*)	1208	26th April 1867	Tempest Booth.
Improvements in dyeing yarns and in the machinery or apparatus employed therefor.	1602	30th May 1867	Hugh Bain.
Treatment of fabrics made wholly or partly of jute, flax, cotton or vegetable fibres, so as to prepare them for dyeing or printing, and rendering them applicable for the manufacture of carpets or other printed goods. (*Communicated by Thomas Crossley.*)	1608	30th May 1867	William Edward Newton.
Improvements in dyeing black upon certain mixed textile fabrics made of worsted, alpaca or mohair woven in combination with cotton, and known generally in the trade as "Bradford goods."	1825	22nd June 1867	Robert Wilson Morrell.
Means and apparatus for ornamenting, printing, coloring, enamelling, staining, cutting, creasing, bending and manufacturing articles from wood and other materials.	2139	23rd July 1867	Edward Tomlinson.
Improvements in the construction of elastic rollers for squeezing yarns and fabrics and for other purposes - - - - - (*used in dyeing.*)	2174	27th July 1867	John Smith. William Schofield.
Machinery for "saving" or covering the lists or edges of fabrics - - - - (*in dyeing.*)	2323	13th Aug. 1867	George Pilling. John Pilling. Frederick Jennings.
Means or apparatus for printing woven and other fabric or material.	2336	14th Aug. 1867	Charles Holliday.
An improved mode or improved means of coloring or ornamenting fabrics and other surfaces, and of preparing printing surfaces. (*Communicated by Charles Depoully.*)	2378	19th Aug. 1867	Clinton Edgcumbe Brooman.
Improved means of and apparatus for heating the water to be used in steam-boilers and in other vessels - - - - - (*in dye pans.*)	2773	2nd Oct. 1867	James Henry Nelson. Thomas Briggs.
Improvements in dyeing black and grey, and in preparing materials therefor - - - (*Communicated by Jules Persoz.*)	2843	9th Oct. 1867	Edouard George. Peter Thomas.
Improvements in looms and in the method or process of preparing weft that will enable the plain loom to weave "checks" or stripe goods - (*dyeing parti-coloured.*)	2926	18th Oct. 1867	John Hill. Sampson Shelley.
Improvements in the dyeing of textile fabrics -	3135	6th Nov. 1867	John Botterill.
Printing rollers used for printing colours on hanks of yarns or threads - - - -	3210	13th Nov. 1867	Frederick Andrew. Ellis Whittaker.
Preparing slivers of wool for spinning and dyeing	3266	18th Nov. 1867	William Busfield. John Busfield. Joseph Busfield.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
DYEING, &c.—*continued.*			
An improved method of and means or apparatus for dyeing textile fabrics, yarns and fibrous substances - - - - -	3267	18th Nov. 1867	William James Hanson. James Charles Ellison.
Apparatus for boiling, washing or cleansing, and dyeing clothes and fabrics, and for other like purposes. (*Communicated by James Brown.*)	3290	20th Nov. 1867	William Brewster.
Improved means or apparatus for dyeing piece goods indigo-blue.	3329	25th Nov. 1867	Thomas Luke Greenwood.
An improved chemical preparation or compound to be used in preparing mixed textile fabrics for dyeing or coloring.	3384	28th Nov. 1867	James Baylis.
Improvements in preparing cloth and yarn to be dyed Turkey red, part of which improvements are applicable to bleaching yarn.	3419	2nd Dec. 1867	William Schofield.
An improved colouring matter chiefly applicable for dyeing and printing purposes. (*Communicated by Jean Théodore Coupier.*)	3657	24th Dec. 1867	Alexander Melville Clark.
See also "DYES."			
DYES AND PRINTING-COLOURS.			
Manufacture and preparation of dry tinctorial compounds capable of easy solution in water. (*stains.*)	106	15th Jan. 1867	Arnold James Cooley.
Producing certain colors from aniline and coal tar -	242	29th Jan. 1867	Emilius de Nève.
Improvements in the manufacture of colours and the extraction of colouring and dyeing matters from coal oil, shale oil or coal tar combined with peat or turf, and for a combination of any of these substances, and also for the utilization of the residue for the purpose of what is known as moulders' blacking after the colouring and dyeing matters have been extracted - -	1151	20th April 1867	Thomas Vincent Lee. Charles Edmund Lankester.
Obtaining violet coloring matters - -	1433	15th May 1867	Ernest Smith.
A new red colouring matter - - -	2270	6th Aug. 1867	Théobalt Luthringer.
A new green colour - - - - (*Communicated by Edward Wiederhold.*)	2437	26th Aug. 1867	William Robert Lake.
Processes of extraction of the coloring matter of indigo from the waste textile fabrics which contain it. (*Communicated by Constant Bernard Paul Scheurer and Jean Baptiste Tempé.*)	2546	9th Sept. 1867	William Edward Gedge.
Improvements in the preparation or treatment of extracts of madder for dyeing and printing purposes, and in apparatus used in such treatment. (*Communicated by Gustave Adolphe Schaaff and Guillaume Ernest Lauth.*)	2852	11th Oct. 1867	Alexander Melville Clark.
Apparatus for separating soluble from insoluble matters, filtering the solutions, and if wished distilling these latter or parts of them. (*extracting colours from dye woods, &c.*)	2863	11th Oct. 1867	Eduard Leitenberger.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
DYES, &c.—*continued.*			
Improvements in treating madder for the purpose of obtaining purpurine or alizarine from the same, and in apparatus to be made use of thereby.	2874	12th Oct. 1867	Eduard Leitenberger.
A new process of producing a blue dye or colouring matter.	3064	31st Oct. 1867	William Smith Dixon.
Improved apparatus for making extracts from bark and other substances. (*colours from dye woods.*) (*Communicated by James Warren Jones.*)	3358	27th Nov. 1867	Alfred Vincent Newton.
An improved colouring matter chiefly applicable for dyeing and printing purposes. (*Communicated by Jean Théodore Coupier.*)	3657	24th Dec. 1867	Alexander Melville Clark.
Printing certain textile fabrics and yarns - - (*and preparing colours.*)	3668	26th Dec. 1867	John Lightfoot.
EARTHENWARE AND PORCELAIN; POTTERY KILNS; POTTERS' GLAZES; CERAMIC WARES; TERRA COTTA.			
Pottery kilns - - - - -	60	9th Jan. 1867	Henry Doulton.
Construction and arrangement of kilns and ovens - (*for pottery.*)	290	2nd Feb. 1867	John Gilbert Robinson.
Manufacture of porcelain - - - (*Communicated by Waldron Joseph Cheyney.*)	642	7th March 1867	William Edward Newton.
China and earthenware knobs for locks and latches	664	8th March 1867	Stephen Hawthorn.
Producing opalline pictures into china, glass, porcelain or any other enamelled surface.	955	30th March 1867	George Higginson.
Improved means of producing surfaces in relief or in intaglio for printing and other purposes. (*printing on ceramic ware.*) (*Communicated by André Adolphe Disderi.*)	968	1st April 1867	Clinton Edgcumbe Brooman.
Bowls, jugs, and all kinds of covered and uncovered articles or vessels made of glass, china, stone or earthenware and other plastic materials.	1174	23rd April 1867	Elisha Leigh.
Improvements in the means and apparatus for pulverizing substances, more particularly applicable to the pulverization of materials for porcelain paste. (*Communicated by Carl Fredrik Tjulander and Johan Robert Alsing.*)	1206	26th April 1867	Charles Denton Abel.
Arrangement and construction of furnaces for steam-boilers and various other useful purposes. (*for pottery ovens.*) (*Communicated by Emmanuel Minary.*)	1495	20th May 1867	John Garrett Tongue.
Ornamenting certain kinds of bowls of castors for furniture - - - - (*of earthenware or china.*)	1519	22nd May 1867	John Cartland. Henry Bold.
Manufacture of articles of earthenware - - (*jugs, bowls, jelly-cans, &c.*)	1538	23rd May 1867	Thomas Goodwin Green.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
EARTHENWARE, &c.—*continued.*			
Machinery or apparatus for separating liquids or moisture from substances, and also for revivifying and cooling animal charcoal and other substances, and for treating sugar. (*drying potters' clay.*)	1605	30th May 1867	William Orr.
Improvements in machinery or apparatus for separating liquids or moisture from substances, and also for revivifying and cooling animal charcoal and other substances, and for treating sugar. (*potters' clay.*)	1707	10th June 1867	William Orr.
An improved reducing machine for grinding and pulverizing metallic ores and any other substances. (*china clay.*)	1939	3rd July 1867	Thomas Borlase.
Apparatus for the manufacture of artificial fuel, which apparatus may also be employed for other purposes. (*for mixing clay.*)	2065	13th July 1867	Henry Fletcher.
Improvements in the means and apparatus for pulverizing substances, more particularly applicable to the pulverization of materials for porcelain paste. (*Communicated by Carl Fredrik Tjulander and Johan Robert Alsing.*)	2975	23rd Oct. 1867	Charles Denton Abel.
Kilns for burning pipes, tiles, bricks, pots and earthenware.	2991	24th Oct. 1867	Henry Adcock.
Method of tinting or colouring photographs, engravings, water colour and other drawings, or porcelain.	3057	30th Oct. 1867	Frederick Piercy.
Manufacture of backs and handles for brushes - (*of earthenware.*)	3089	2nd Nov. 1867	James Joseph Hicks.
New and useful machinery for making, drying and burning bricks and tiles, applicable in part to baking pottery ware.	3220	13th Nov. 1867	Peter Edward Bland.
An improved method of transmitting motive-power to potters' wheels, lathes, jiggers and other similar machinery for the manufacture of pottery and other articles made from clay.	3319	23rd Nov. 1867	William Boulton.
Construction of articles of earthenware - -	3380	28th Nov. 1867	James Richard Pratt.
Improvements in furnaces and in effecting the combustion of fuel therein. (*for manufacture of earthenware.*)	3468	5th Dec. 1867	Thomas Joseph Leigh.
Treatment of gutta-percha, indian-rubber, Honduras gum, and the other allied gums, for the production of a preparation or preparations applicable as a varnish, cement, paint, stain, water and air-proof material, solid or elastic material and for other purposes. (*substitute for earthenware.*) (*Communicated by Daniel Reed.*)	3542	13th Dec. 1867	Edward Reed Sintzenich.
Preparation of material to be used in the manufacture of porcelain and pottery.	3577	16th Dec. 1867	William Henry Kerr.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
ELECTRICITY, GALVANISM AND MAGNETISM, AND THEIR APPLICATION.			
An improved method of separating silver from lead. (*Communicated by Francisco Marquez-Millan.*)	87	14th Jan. 1867	William George Blagden.
Apparatus used when probing for balls or projectiles.	98	14th Jan. 1867	Sylvan de Wilde.
Electrical apparatus - - - - -	177	24th Jan. 1867	Alfred Apps.
Power looms for weaving terry and cut-pile fabrics	237	29th Jan. 1867	Peter Jack, junior. Alameth Coulthurst.
Improved methods for developing powerful electrical currents and discharges, principally applicable to the production of lights at sea, and in apparatus for determining electrical resistances in connection with such and other currents. (*Partly communicated by Dr. Werner Siemens.*)	261	31st Jan. 1867	Charles William Siemens.
An improved process for obtaining metals from their ores. (*Communicated by John Nevious Wyckoff.*)	285	1st Feb. 1867	William Edward Newton.
A mechanical process of electro-engraving by means of an electro-magnetic engraving machine	364	8th Feb. 1867	Pierrè Eliè Gaiffe. Amédée Arthur Lalance.
An improved mode of and apparatus for letting on and shutting off gas, and igniting the same. (*Communicated by Edwin Eaton Bean and William Howard Mumter.*)	463	20th Feb. 1867	George Haseltine.
Improved apparatus for fastening or connecting the wires employed for transmitting electric signals on railway trains.	488	22nd Feb. 1867	Alice Isabel Lucan Gordon.
Destroying explosive gases in coal and other mines, in order to render them safe for the miners to enter - - - -	565	28th Feb. 1867	James Herbert. Frederick Goodman.
Apparatus for measuring the speed of ships and other vessels, and the velocity of running or flowing water. (*Communicated by Louis Alfred Anfonso.*)	663	8th March 1867	Michael Henry.
Improved means and apparatus for protecting the needles of mariners' and other compasses from local attraction.	676	9th March 1867	John Sacheverell Gisborne.
Electro-magnetic and magneto-electric induction machines.	842	23rd March 1867	Henry Wilde.
Improved means of communication between a railway station and the guard or other person in charge of a train at a distance, or between the guards of two trains on the same line - -	905	28th March 1867	John Arnold. George Daniel.
An improved method of and apparatus for communicating between the several parts of railway trains.	1021	5th April 1867	James Graham Tatters.
Improvements in apparatus for regulating and transmitting electric currents, more especially designed for use in connection with telegraphic recording instruments for long submarine lines.	1053	8th April 1867	George Little.
An improvement or improvements in the manufacture of iron. (*passing electricity through melted iron.*)	1087	12th April 1867	William Henry Dawes.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
ELECTRICITY, &c.—*continued.*			
Improvements in Sir William Snow Harris's lightning conductors for ships, vessels, buildings and other structures.	1127	16th April 1867	Thomas Wood Gray.
Magneto-electric machines - - - - - (*Communicated by Joseph Nicolas Maximilien Van Malderen.*)	1210	26th April 1867	John Henry Johnson.
A new and improved means of transmitting by electricity the hour and the synchronism of the hours between public and private clocks. (*Communicated by Victor Delay.*)	1275	2nd May 1867	Henri Adrien Bonneville.
Improvements in magneto-electric signal lights and in apparatus connected therewith. (*Communicated by Auguste Berlioz.*)	1308	4th May 1867	John Henry Johnson.
Apparatus for generating electricity and applying it to produce motive-power.	1314	4th May 1867	Lieut^{t}. Colonel James Baker.
Construction of automaton figures or toys - -	1334	7th May 1867	John Scott Cavell.
A method of manufacturing illuminating gases - (*Communicated by William Elmer.*)	1448	16th May 1867	George Tomlinson Bousfield.
Improvements in the construction of a steam vessel suitable for ferrying laden trains across the ocean, complete, together with its landing-places, breakwaters, and modes of protection from marine insects and fouling, which improvements are also generally applicable to other vessels, and to the protection of iron and wood exposed to the action of the sea. (*generating electricity.*)	1503	21st May 1867	Edward Henry Cradock Monckton.
Telegraphic instruments and electric clocks - -	1531	23rd May 1867	Meinrad Theiler, sen^{r}. Richard Theiler. Meinrad Theiler.
Construction of magneto-electric batteries - - (*Communicated by Sōren Hjorth.*)	1611	30th May 1867	Marc Antoine François Mennons.
Improvements in electrical clocks, which improvements may also be applied to other electrical instruments.	1641	4th June 1867	John Inshaw.
Galvanic batteries - - - - -	1654	5th June 1867	Charles Boulay.
Flexible galvanic batteries applicable to medico-electric purposes.	1750	15th June 1867	Richard Beard.
Electric telegraphs - - - - (*generating electricity.*)	1755	15th June 1867	Cornelius Varley. Samuel Alfred Varley.
Mode of applying metal sheathing to iron ships, caissons and floating docks, and other iron constructions subject to corrosion.	1961	4th July 1867	William Day.
Apparatus for preventing accidents at junctions, crossings and sidings of railways.	2123	20th July 1867	Charles Frederick Whitworth.
Preserving iron from oxidation - - - (*Communicated by Monsieur Alfred Delcelier.*)	2142	23rd July 1867	Hector Auguste Dufrené.
Signalling upon railway trains, parts of which apparatus are applicable to electric telegraphs generally - - - - -	2207	30th July 1867	Samuel Manley Martin. Samuel Alfred Varley.
Apparatus for the production of the electric light -	2221	1st Aug. 1867	Frederick Hale Holmes.
Refrigerating apparatus applicable for the manufacture of ice and for other refrigerating purposes. (*Communicated by Jean Baptiste Toselli.*)	2303	10th Aug. 1867	Alexander Melville Clark.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
ELECTRICITY, &c.—*continued.*			
Apparatus for the production of the electric light -	2307	10th Aug. 1867	Frederick Hale Holmes.
Machinery for setting up and distributing printing types - - - - - -	2432	24th Aug. 1867	Pierre Kniaghininsky. Pierre Galahoff. Nicolas Ossipoff.
Preventing the deviation of the compasses of iron or steel ships. (*demagnetising iron ships.*)	2592	13th Sept. 1867	Frederick Arthur Paget.
Improvements in apparatus for testing telegraph conductors, part of the invention being applicable to other purposes.	2622	18th Sept. 1867	Frederick Henry Varley.
Construction and mode of propelling and maneuvering floating batteries and other vessels intended for the purposes of naval defence and attack. (*electro-magnetic governing apparatus.*)	2743	28th Sept. 1867	John Elder.
A medical electric bath for men and animals, on the filtering principle by triple current which is connected with the earth. (*Communicated by Jean Baptiste Marie Potin.*)	2835	9th Oct. 1867	Adolphe Danilecki.
Means or mode of signalling upon railways - -	2908	17th Oct. 1867	Marmaduke Wilkin. John Clark.
Improvements in treating oils and spirits, and in apparatus to be used for this purpose.	3191	11th Nov. 1867	Francis Louis de Gerbeth.
Electric telegraph apparatus - - - - (*lightning arrester.*) (*Communicated by Silvanus Frederic Van Choate.*)	3346	26th Nov. 1867	William Robert Lake.
An improved construction of cell for galvanic batteries.	3476	6th Dec. 1867	Henry Joseph Francis Hubert Foveaux.
Prevention of incrustation in steam-boilers - -	3483	7th Dec. 1867	Richard Boulton Jones. William Powell.
An improved process for the reduction of tin so as to render it applicable for coating metals and for other purposes. (*reducing electro-chemically.*) (*Communicated by Jules Fenquières.*)	3517	11th Dec. 1867	Alexander Melville Clark.
Improvements applicable to traps for pigeon and other shooting.	3660	24th Dec. 1867	Frederick Render.
Improvements in the application of electricity to clocks, watches and other time-keepers, and in the apparatus employed therein. (*Communicated by Theodore Auguste Marie Sortais.*)	3684	27th Dec. 1867	Clinton Edgcumbe Brooman.
Improvements in motors or apparatus for generating motive-power, and in the method of applying the same to produce useful effect. (*Communicated by Benjamin Talbot Babbitt.*)	3690	28th Dec. 1867	William Edward Newton.

For electric telegraphs, *see* "TELEGRAPHS."
For magnetic compasses, *see* "COMPASSES."
See also "ELECTRO-PLATING."

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
ELECTRO-PLATING AND GALVANISING; DEPOSITING METAL BY ELECTRICITY.			
Improvements in coating metals and in apparatus employed therein and for like purposes. (*galvanising.*)	810	20th March 1867	Gustav Bischof, junior.
Improved means of producing surfaces in relief or in intaglio for printing and other purposes. (*by galvano-plasty.*) (*Communicated by André Adolphe Disderi.*)	968	1st April 1867	Clinton Edgcumbe Brooman.
Improvements in obtaining useful products from certain materials produced in the process of galvanizing or coating iron with zinc.	1107	13th April 1867	Charles Crockford.
An improved method of and apparatus for galvanizing or tinning and zinking iron wire and other description of iron. (*Communicated by Emile Delacroix.*)	1169	22nd April 1867	William Edward Gedge.
Preserving iron from oxidation - - - (*Communicated by Monsieur Alfred Delcelier.*)	2142	23rd July 1867	Hector Auguste Dufrené.
Obtaining sulphuric acid from the refuse "pickle" or "liquor" used in wire and galvanizing works.	2259	5th Aug. 1867	William John Pughsley.
An improved process for the reduction of tin so as to render it applicable for coating metals and for other purposes. (*Communicated by Jules Fenquiéres.*)	3517	11th Dec. 1867	Alexander Melville Clark.
EMBOSSING; PRODUCING RAISED PATTERNS.			
Production of printing and embossing surfaces from photographs.	45	7th Jan. 1867	Robert Howe Ashton.
Ornamenting, printing, cutting, creasing, bending, embossing and manufacturing articles from wood and other materials.	155	22nd Jan. 1867	Edward Tomlinson.
Improved means of producing designs upon paper (*by pressure from reliefs.*)	947	30th March 1867	Walter Bentley Woodbury. Robert Howe Ashton.
Improved means of producing surfaces in relief or in intaglio for printing and other purposes. (*Communicated by André Adolphe Disderi.*)	968	1st April 1867	Clinton Edgcumbe Brooman.
Production of designs upon fabrics composed of fibrous materials - - - -	1182	23rd April 1867	Jesse Brickles. John Samuel Jackson. Walter Scott Berry.
An improved stamping machine - - - (*for producing raised devices.*)	1692	8th June 1867	John Turner. Robert Buchanan Dunnett.
Ornamenting surfaces of paper, woven fabric and other material, to render them suitable for bookbinding and other similar uses.	1695	8th June 1867	Alexander Parkes.
Apparatus for punching, cutting and embossing -	1702	10th June 1867	Andrew Linmere Dowie. Robert M^{c}Intyre.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
EMBOSSING, &c.—*continued.*			
Improvements in the treatment of fibrous materials and in apparatus used therein. (*embossing felted fabrics.*)	3510	10th Dec. 1867	John Watson Burton.
An improved process for the reduction of tin so as to render it applicable for coating metals and for other purposes. (*forming relief surfaces.*) (*Communicated by Jules Fenquieres.*)	3517	11th Dec. 1867	Alexander Melville Clark.
ENAMELLING, ENAMELS.			
A new or improved enamel for enamelling metals and stones, to prevent rust, corrosion and incrustation - - - - - -	1118	15th April 1867	The Rev^{d}. Joseph Oakden. Joseph Pickin.
Improvements in beer engines, which improvements are also applicable to pumps for various purposes. (*enamelling valve seat chambers.*)	1297	3rd May 1867	John Holmes.
Improvements in guns, projectiles and cartridges, and in the construction of the same. (*enamelling projectiles.*)	1757	15th June 1867	George Clark.
Means and apparatus for ornamenting, printing, coloring, enamelling, staining, cutting, creasing, bending and manufacturing articles from wood and other materials.	2139	23rd July 1867	Edward Tomlinson.
Improvements in guns, projectiles and cartridges, and in the construction of the same. (*enamelling projectiles.*)	3562	14th Dec. 1867	George Clark.
ENGRAVING AND ETCHING; PRODUCING SUNK DEVICES.			
Certain improvements in the art of making photographic transfers, adapted to the purpose of engraving or lithography, or of making plates or blocks from which to print the design or other matter transferred.	71	11th Jan. 1867	Arthur Guy Morvan.
Improvements in the means whereby tools or operating implements, instruments, appliances or parts of machinery or apparatus may be moved to and worked at various parts of articles or surfaces to be operated on by the same. (*engraving and chasing.*) (*Communicated by Norbert Belvallette.*)	105	15th Jan. 1867	Michael Henry.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
ENGRAVING, &c.—*continued.*			
A mechanical process of electro-engraving by means of an electro-magnetic engraving machine	364	8th Feb. 1867	Pierre Elie Gaiffe. Amédée Arthur Lalance.
Improved means of producing designs upon paper (*by pressure from intaglios.*)	947	30th March 1867	Walter Bentley Woodbury. Robert Howe Ashton.
Improved means of producing surfaces in relief or in intaglio for printing and other purposes. (*Communicated by André Adolphe Disderi.*)	968	1st April 1867	Clinton Edgcumbe Brooman.
An improved stamping machine - - - (*for producing sunk devices.*)	1692	8th June 1867	John Turner. Robert Buchanan Dunnett.
A new or improved engraving machine - - (*Communicated by John Corvosso Guerrant and Benton Jeremiah Field.*)	2218	1st Aug. 1867	William Snell.
Improved machinery for cutting, carving and engraving upon ivory, wood, stone, metals and other substances. (*Communicated by Isaac Hall.*)	2497	3rd Sept. 1867	Alexander Melville Clark.
Improvements in apparatus for the manufacture of postage stamps and other labels, and for reproducing designs on paper or fabrics, and in the preparation of engraved surfaces to be used therefor. (*Communicated by Eugène Bordes, junior.*)	3009	25th Oct. 1867	Alexander Melville Clark.
ENVELOPES.			
Ornamenting, printing, cutting, creasing, bending, embossing and manufacturing articles from wood and other materials. (*envelopes.*)	155	22nd Jan. 1867	Edward Tomlinson.
Manufacture of envelope cases, blotting books and other articles, commonly called "writing" or "library sets," and other similar articles.	305	4th Feb. 1867	George William Betjemann.
An improved preparation of materials and the application thereof to letters, envelopes, parcels, packages, deeds and other valuable papers or commodities, for their better security, by exposing any attempt at tampering therewith.	491	22nd Feb. 1867	Charles Maitland Tate.
Manufacture of envelopes - - - -	524	26th Feb. 1867	Edward Hely.
Envelopes - - - -	900	27th March 1867	Leon Foinquinos.
Improvements in apparatus for applying adhesive agents to pieces of paper and other light materials, and for lifting the same, especially applicable to machinery for the manufacture of envelopes.	1623	31st May 1867	Phineas Lawrence.
Method of fastening and securing the overlapping parts of envelopes for enclosing letters and other matters.	1882	27th June 1867	William Davis.
Manufacture of cases, envelopes or wrappers for needles and pins. (*see* "PINS.")	2225	1st Aug. 1867	Richard Newhall.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
ENVELOPES.—*continued.*			
An improved apparatus for sealing letters, envelopes and other papers.	2372	17th Aug. 1867	Mayer Cahen.
Improved machinery or apparatus to be used in the manufacture of envelopes - - -	2675	23rd Sept. 1867	John Griffin. Frank Green.
Envelopes - - - - -	2681	23rd Sept. 1867	Rudolph Wappenstein. Alexander Laidlaw.
An improved method for producing from one piece of writing paper a sheet of note or letter paper and an envelope to enclose the said sheet of paper, also for other improvements connected therewith.	2966	22nd Oct. 1867	Nicolas Alfred Thoumelet.
Manufacturing and securing envelopes - - (*Communicated by Sigmund Ullman.*)	3252	16th Nov. 1867	Alfred Vincent Newton.
Envelopes - - - - - -	3342	26th Nov. 1867	Charles Elias Penny.
EXCAVATING AND DREDGING; TUNNELS AND EMBANKMENTS.			
Improved machinery for pocketing hops, for puddling dams, for punning at back of long retaining walls, river or sea embankment facings and such like works.	57	9th Jan. 1867	Richard Winder.
Improvements in the mode of and apparatus for manufacturing beton, and in the method of applying beton for certain constructive or structural purposes. (*for embankments.*) (*Communicated by François Coignet.*)	77	11th Jan. 1867	Michael Henry.
Improvements in engines or machinery for boring or working rock and other material, and in stands for such engines.	296	2nd Feb. 1867	Edward Smith Crease.
Breaks and apparatus for giving motion to machinery. (*dredging machines.*)	299	2nd Feb. 1867	Robert David Napier.
Improved means for raising sand or shingle covered by the tide to the level of high water, and therewith forming embankments for the construction of sea works.	387	12th Feb. 1867	Edward Manico.
Machinery for mining, cutting or working coal and other minerals, and for hammering metals and crushing minerals. (*cutting rock for tunnelling.*)	535	27th Feb. 1867	Andrew Howat.
An improved apparatus to deepen, excavate, scour and remove the mud, slime, stones and other foul matters from the bed of rivers, streams and other watercourses. (*Communicated by Joseph Grosley and Louis Albert Merckens.*)	539	27th Feb. 1867	Henri Adrien Bonneville.
Process and apparatus for perforating tunnels and galleries of mines of great length, through rocks, much quicker than by the process hitherto employed.	575	1st March 1867	Theophilus Berrens.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
EXCAVATING, &c.—*continued.*			
Machinery and apparatus for moving mud, sewage, sand, small gravel or other similar matter, from one place to another. (*Communicated by James Burt.*)	702	12th March 1867	Thomas Burt.
Machinery for boring and excavating coal and other minerals.	733	14th March 1867	William Read.
Machinery for actuating tools used in mining or excavating or boring, part of the improved machinery being also applicable for actuating mine or other pumps.	1123	16th April 1867	George Simpson.
Mining, tunnelling and stone dressing machines, and valve motion therefor. (*Communicated by Richard Channing More Lovell.*)	1566	27th May 1867	William Snell.
An improved machine or plough for clearing or grubbing up uncultivated land. (*or making cuttings for railroads and canals.*)	1573	28th May 1867	Florent Joseph Vandenvinne.
Improvements in machinery employed in getting coal, stone and other minerals, and in apparatus connected therewith.	1927	2nd July 1867	John Sturgeon.
Improved apparatus for boring or perforating rocks, metals or other substances. (*excavating tunnels.*) (*Communicated by Horric de la Roche Tolay.*)	2027	10th July 1867	William Edward Newton.
Entrenching tools to be carried on the stocks of fire-arms.	2120	20th July 1867	Kenneth Henry Cornish.
Improvements in dredging machinery, and apparatus or appliances for the stowage and discharge of substances dredged up, the said apparatus or appliances being applicable to lighters, barges or vessels used for other purposes.	2279	7th Aug. 1867	Richard Henry Michell.
Improvements in machinery used in cutting coal, stone, slate and other minerals, and in forming tunnels and galleries, and for other quarrying purposes.	2451	28th Aug. 1867	John Elliott.
Improvements in electric telegraph conductors and in the means of laying and securing the same, also in the machinery and apparatus to be employed therein. (*forming trenches.*)	2480	31st Aug. 1867	Donald Nicoll.
Machinery for boring, cutting or working in rock, coal and other mineral.	2503	4th Sept. 1867	Frederick Bernard Dœring.
Improvements in tunnelling and quarrying slate and other minerals, and in machinery used for these purposes.	2580	11th Sept. 1867	William Fothergill Cooke.
Improvements in machinery or apparatus for cutting or working rocks and other hard substances, chiefly designed for mining, tunnelling and other like operations. (*Communicated by Herman Haupt.*)	2607	16th Sept. 1867	James Asbury M^{c}Kean.
An improved apparatus to be used in excavating -	2826	8th Oct. 1867	John Bostock Hulme.
Machinery for excavating, raising and depositing soil.	3049	29th Oct. 1867	William Peacock Savage.
Improvements in machinery employed in getting coal, stone and other minerals, and in apparatus connected therewith.	3076	1st Nov. 1867	John Sturgeon.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
EXCAVATING, &c.—*continued.*			
Improvements in machinery for boring rocks, and in apparatus for driving rock-boring, tunnelling, coal cutting and other machinery employed in mines, collieries and quarries - -	3386	29th Nov. 1867	Thomas Brown Jordan. John Darlington.
Excavating machines more especially designed for making ditches and drains. (*Communicated by Henry Charles Ingraham.*)	3500	9th Dec. 1867	William Robert Lake.
Apparatus for measuring approximately the quantities of earth-work in continuous cuttings or banks such as are used in the formation of railways.	3506	10th Dec. 1867	William Henry Barlow.
EXTRACTS AND DECOCTIONS.			
Manufacture and preparation of dry tinctorial compounds capable of easy solution in water.	106	15th Jan. 1867	Arnold James Cooley.
A new and improved means of preserving solutions of certain plants and matters in a concentrated state. (*Communicated by Clémence d'Estains, widow of Léon de Wailly.*)	684	11th March 1867	Henri Adrien Bonneville.
Apparatus for separating the grounds from the liquid in making coffee.	828	22nd March 1867	William Robert Lake.
An improved apparatus for concentrating the extracts of bark for tanning and other purposes. (*Communicated by Benjamin Irving.*)	919	28th March 1867	William Robert Lake.
An improved mode of and machinery for obtaining the extracts of bark for tanning and other purposes. (*Communicated by Benjamin Irving.*)	920	28th March 1867	William Robert Lake.
Apparatus for making infusions of coffee and other infusions.	1281	2nd May 1867	Frederick Walton.
Certain processes of manufacturing extract and essence of hop to be substituted for the plant itself in the making of beer.	2132	22nd July 1867	Theophile Auguste Breithaupt.
Improved apparatus for obtaining extracts from vegetable substances.	2493	3rd Sept. 1867	Peter Frederick Lunde.
Apparatus for separating soluble from insoluble matters, filtering the solutions, and if wished distilling these latter or parts of them.	2863	11th Oct. 1867	Eduard Leitenberger.
Improved apparatus for making extracts from bark and other substances. (*Communicated by James Warren Jones.*)	3358	27th Nov. 1867	Alfred Vincent Newton.
Bags for coffee and other such like pots.	3462	5th Dec. 1867	John Mabson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FABRICS; ELASTIC FABRICS.			
An improved manufacture of brace fabric - -	280	1st Feb. 1867	Samuel Hall Foster.
An improved fabric in imitation of the skins of animals, suitable for the manufacture of ladies' mantles, carriage rugs and other articles.	356	8th Feb. 1867	Edwin Firth.
Preparation of threads and the manufacture of fabrics from the threads so prepared. (*see* "WEAVING.") (*Communicated by Stanislas Vigoureux.*)	509	23rd Feb. 1867	Clinton Edgcumbe Brooman.
An improvement in the manufacture of towels -	513	25th Feb. 1867	John Cash. Joseph Cash, jun^{r}.
Certain improvements in the method of producing selvedge lines or borders on woven fabrics, and in apparatus connected therewith - -	585	2nd March 1867	Samuel Frank. Richard Gooddy.
A new and useful fabric for elastic stockings, stays or corsets, bandages and other similar analogous articles.	592	2nd March 1867	Anne Catherine Laurys.
Disaggregation of china grass, hemp, flax, jute, phormium tenax and other vegetable fibres, for the production of threads, fabrics, and pulp for paper. (*see* "SPINNING.") (*Communicated by François Mathurin Caillard.*)	799	19th March 1867	William Clark.
Improvements in the manufacture of textile fabrics and in the means or apparatus employed therein. (*see* "SPINNING.")	815	21st March 1867	James Booth.
Manufacture of boot elastic web and other fabrics -	939	29th March 1867	William Gadd. Louis Baillon.
Certain improvements in the manufacture of textile fabrics called "imperials," "velvets," "velveteens," "satteens" and "drills," which improvements are also applicable for the manufacture of fabrics such as "doe skins," tweeds and other fancy woollen cloths. (*see* "WEAVING.")	976	2nd April 1867	Robert Wolstenholme.
"Tilloting" or wrappers for covering woollen fabrics known as "long ells" and Spanish stripes, suitable for the India and China markets. (*see* "PRINTING.")	1090	12th April 1867	Joseph Walton Wallis.
Improvements in the manufacture of elastic cords or bands applicable to various purposes, such as for driving bands, blind cords, and other analogous purposes in which a certain degree of elasticity is required.	1133	17th April 1867	Archibald Turner.
Production of designs upon fabrics composed of fibrous materials - - - - (*see* "EMBOSSING.")	1182	23rd April 1867	Jesse Brickles. John Samuel Jackson. Walter Scott Berry.
Manufacture of a certain description of woven fabric. (*for towels.*)	1189	24th April 1867	John David Brickles.
Improvements in the treatment of fibrous materials and in apparatus to be used in such treatment. (*for making "velvet cloth" and "Leeds alpaca cloth."*)	1207	26th April 1867	John Watson Burton.
Manufacture of knitted fabrics - - - (*substitutes for twist net, buckram, muslin, &c.*)	1298	3rd May 1867	Samuel Thacker.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FABRICS, &c.—*continued.*			
An improved fabric for the manufacture of machine belting and for other purposes. (*Communicated by Zenas Marshall Crane and James Brewer Crane.*)	1524	22nd May 1867	Alexander Melville Clark.
Improvements in the manufacture of what are termed watered fabrics, and in apparatus connected therewith. (*Communicated by César Tavernier.*)	1555	25th May 1867	Alexander Melville Clark.
Certain improvements in the manufacture of felt carpeting. (*see* "FULLING.")	1588	29th May 1867	Thomas Mitchell.
Treatment of fabrics made wholly or partly of jute, flax, cotton or vegetable fibres, so as to prepare them for dyeing or printing, and rendering them applicable for the manufacture of carpets or other printed goods. (*Communicated by Thomas Crossley.*)	1608	30th May 1867	William Edward Newton.
Manufacture of certain descriptions of woollen cloths - - - - - - (*see* "SPINNING.")	1683	7th June 1867	Robert Scott the younger. Joseph Nixon. John Beaumont.
Production of ornamental textile fabrics - -	1807	20th June 1867	William Clarke.
Improvements in blankets used in machines for printing textile fabrics, and in the mode of joining together the ends of double-woven fabrics. (*Communicated by Seth William Baker.*)	1889	28th June 1867	Edward Joseph Hughes.
Improvements in textile fabrics and in the apparatus or means employed for effecting the same. (*see* "PRINTING.")	1906	29th June 1867	Alexander Stewart.
An improved manufacture of elastic woven fabric applicable to the manufacture of gloves, drawers, under-shirts, and other elastic articles usually made from looped or knitted fabrics - -	1998	8th July 1867	Archibald Turner. William Hemsley.
Machinery for "saving" or covering the lists or edges of fabrics - - - - - (*see* DYEING.")	2323	13th Aug. 1867	George Pilling. John Pilling. Frederick Jennings.
Certain improvements in the manufacture of fabrics termed "union flannels," and in other similar "union" fabrics. (*see* "WEAVING.")	2407	22nd Aug. 1867	David Howard.
An improvement in the manufacture of towels -	2424	24th Aug. 1867	John Cash. Joseph Cash, junr.
Improvements in textile fabrics and in the apparatus or means employed for effecting the same.	2460	29th Aug. 1867	Alexander Stewart.
Fringes - - - - -	2560	10th Sept. 1867	John Holliday.
Certain improvements in the manufacture of fabrics termed "union flannels" and in other similar "union" fabrics. (*see* "WEAVING.")	2658	21st Sept. 1867	David Howard.
Preparation or treatment of linen and cotton fabrics in order to adapt them to the manufacture of certain articles of wearing-apparel - - (*see* "FINISHING.")	2738	28th Sept. 1867	Alfred Ward. Charles George Virgo.
An improved species of fabric - - -	2774	2nd Oct. 1867	Matthew Wright.
Utilizing refuse animal matters and producing skins and sheets therefrom. (*substitute for cotton cloth.*)	2822	7th Oct. 1867	John Harcourt Brown.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FABRICS, &c.—*continued.*			
Manufacture of ornamental fabrics - -	2985	24th Oct. 1867	James Thom. Alexander Maclure.
Improvements in the manufacture of circular webbing or gasket, applicable as packing for steam-engines, as covering for telegraph cables and other useful purposes, and in the machinery employed therein.	3046	29th Oct. 1867	Joseph Threlfall Carter.
Improvements in the manufacture of elastic fabrics, part of which invention is especially applicable to the production of shaped slipper fronts and similar articles.	3173	9th Nov. 1867	Caleb Bedells.
Ornamenting gauze and other fabrics - - (*see* "PRINTING.") (*Communicated by Eugène Siess.*)	3357	27th Nov. 1867	Alexander Melville Clark.
An improved elastic material to be used as springs in boots and shoes, and in various other ways to which the same may be applicable.	3445	4th Dec. 1867	Christopher Paley.
Ornamenting lace and other textile fabrics - (*see* "CEMENTED FABRICS.")	3452	4th Dec. 1867	Francis Bryan Baker. Leonard Lindley.
Treatment of paper and certain woven fabrics for rendering them ornamental and durable as articles of dress, and for decorative and ornamental purposes.	3535	12th Dec. 1867	Edward Reed Sintzenich.
Manufacture of mohair and similar fabrics - - (*see* "WEAVING.")	3540	12th Dec. 1867	James Robinson.
Certain improvements in the method of and means for retaining the outer ends of tapes, ribbons, and other similar narrow fabrics and paper.	3545	13th Dec. 1867	Gervase Marson.
Improvements in brattice cloth and in its manufacture.	3561	14th Dec. 1867	John Howard Kidd.
An improved patent invulnerable cloth armour -	3579	16th Dec. 1867	Major Chevalier Cesare Bernieri.
Manufacture of fabrics to be made into skirts - (*see* "WEAVING.")	3618	19th Dec. 1867	William Black Pullar.
Improvements in blankets used in machines for printing textile fabrics, and in the mode of joining together the ends of double-woven fabrics. (*Communicated by Seth William Baker.*)	3674	27th Dec. 1867	Edward Joseph Hughes.
FEATHERS; ARTIFICIAL FEATHERS AND FLOWERS.			
Manufacture of artificial flowers and foliage -	981	2nd April 1867	Thomas Blizard Robinson.
Improved means of applying and fixing metals on fabrics, feathers, artificial flowers and other articles. (*Communicated by Georges Henri Berand and Pierre Dugué.*)	1913	29th June 1867	Clinton Edgcumbe Brooman.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FEATHERS, &c.—*continued.*			
A new and improved means of utilizing all the parts of all sorts of feathers. (*Communicated by Jean Louis Frédéric Bardin.*)	2247	3rd Aug. 1867	Charles Touaillon, junior.
Means of tinting or coloring artificial flowers and foliage. (*Communicated by Octave Eugéne Fillion.*)	2644	20th Sept. 1867	Alexander Melville Clark.
FENCES AND RAILINGS.			
Railings or fences - - - - (*Communicated by Arthur Gandillot.*)	84	12th Jan. 1867	John Henry Johnson.
Hurdles, lifts and fencing for agricultural and other purposes.	475	21st Feb. 1867	John Sainty.
Certain improvements in the manufacture of metallic bedsteads, part of which said improvements are applicable to cornice poles, gas fittings, balustrades and other like articles - -	639	7th March 1867	Robert Luke. William Parkes.
Construction of fences, hurdles and gates - -	831	22nd March 1867	Peter Dickenson.
Improvements in iron and wire continuous fencing and in the lapping machinery employed therein, and in the manufacture of guards and other descriptions of wire-work.	874	26th March 1867	Edward Owen Greening.
An improved mode of coupling telegraph and other wires. (*for fencing.*) (*Communicated by David McComb.*)	951	30th March 1867	James Jennings McComb.
An improved machine for cutting scale-board, and for the manufacture of the scale-board or material cut by said machine into an improved fabric for structures generally. (*for fences.*) (*Communicated by John Kinney Mayo.*)	1051	8th April 1867	William Clark.
Construction of movable palisades for parks, gardens and enclosures, the said invention being also applicable to training espaliers, vines and shrubs.	1257	1st May 1867	Antoine Louet.
Ornamental balusters and balustrades, and other ornamental rails.	1364	8th May 1867	Henry Richard Cottam.
Improvements in the manufacture or construction of gates and fences, part of which invention is applicable to straining wires and to other straining purposes - - - -	1667	6th June 1867	George Rich Turner. William Thomas Allen.
Improvements in the construction and manufacture of iron or metal rail rods or bars for balconies, gates, railings, pillars, standards or columns and other useful purposes, and also in the machinery employed therein.	1739	14th June 1867	Stephen Tuddenham.
Folding wire netting adapted for poultry, sheep and other fencing.	1891	28th June 1867	George Kennedy Geyelin
Hurdles, lifts and fencing for agricultural and other purposes.	2396	21st Aug. 1867	John Sainty.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FIBRES (*Obtaining from Plants, Recovering from Manufactured Goods, Separating, Cleansing, Packing.*)			
Machinery for ginning cotton - - - (*Communicated by Charles Wilson Boyd.*)	153	21st Jan. 1867	William McAndrew.
A new method of scouring or cleansing raw wool and woollen stuffs. (*Communicated by Adolphe Philippe and Gustave Fortier.*)	257	30th Jan. 1867	Clinton Edgcumbe Brooman.
Treating and preparing silk - - - (*Communicated by Adolphe Philippe and Gustave Fortier.*)	264	31st Jan. 1867	Clinton Edgcumbe Brooman.
Improved machinery for separating the fibres of woods into shreds suitable for converting into pulp for paper making, and also for stuffing and packing various useful articles.	287	1st Feb. 1867	Frederick Bauman.
Treating vegetable substances chiefly applicable to the manufacture of paper pulp and fibres. (*Communicated by Benjamin Chew Tilghman.*)	385	11th Feb. 1867	William Edward Newton.
Machinery for scutching flax or other fibrous materials, and also for opening and straightening fibrous materials (which have been previously made up into yarns and threads), in order to prepare the same for spinning and other purposes.	450	19th Feb. 1867	Edward Brasier.
An improved flax stripping or peeling machine - (*Communicated by Pareydt de Bergues.*)	596	4th March 1867	William Edward Gedge.
Treatment or preparation of straw and other fibrous materials for the manufacture of paper.	647	7th March 1867	Edward Lloyd.
Machinery for washing and cleansing wool and other fibrous materials.	713	12th March 1867	James Lee Norton.
Disaggregation of china grass, hemp, flax, jute, phormium tenax and other vegetable fibres, for the production of threads, fabrics, and pulp for paper. (*Communicated by François Mathurin Caillard.*)	799	19th March 1867	William Clark.
Improvements in means or apparatus employed for treating flax, hemp, jute, china grass or other similar fibrous materials.	801	20th March 1867	Robert Hanham Collyer.
Machinery for seeding, breaking, drying, washing, bleaching, softening, combing, brushing and hackling flax, hemp, jute, China grass, New Zealand flax, Esparto and other fibres, for spinning and paper stuff.	841	22nd March 1867	John Spencer.
Treatment of wool and other animal textile materials, whether in a raw or manufactured state. (*Communicated by Jean Baptiste Frezon the elder.*)	861	25th March 1867	John Henry Johnson.
Method and means to be employed in cleansing wool previous to combing or carding the same. (*Communicated by André Jules Grand Ry and Corneil Joseph Petit.*)	872	26th March 1867	Arthur Charles Henderson.
Certain improvements in machinery or apparatus to be employed in the preparation of cotton, wool and other similar fibrous materials.	907	28th March 1867	William Crighton.
Engines and machines for washing, beating, grinding or reducing rags and other fibrous substances into paper pulp, and into fibres for yarns or cloth.	914	28th March 1867	William Wood.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FIBRES, &c.—*continued.*			
Preparation of fibre from rags or other semi-waste substances wholly or partly of wool or animal fibre, for the manufacture of yarns.	934	29th March 1867	William Wood.
Treatment of flax, hemp, jute, China grass and other fibrous materials.	948	30th March 1867	Robert Hanham Collyer.
Machines for washing wool and other fibrous materials.	1013	4th April 1867	John Petrie, jun^{r}.
Machinery or apparatus for teazing and opening textile or fibrous materials - - -	1019	5th April 1867	William Tatham. William Tweedale Heap.
Improvements in treating and softening jute, hemp, flax and other fibrous substances, and in the machinery or apparatus connected therewith.	1034	6th April 1867	William Parell Butchart.
Machinery for picking and ginning cotton - - (*Communicated by Enoch Osgood.*)	1068	10th April 1867	Alfred Vincent Newton.
Machinery for preparing and spinning cotton and other fibrous materials - - - (*opening.*)	1079	11th April 1867	James Higgins. Thomas Schofield Whitworth.
Machinery for washing wool and other fibrous materials - - - - -	1155	20th April 1867	John Petrie the younger. Reuben Ackroyd.
A new or improved process of destroying vegetable matters in wools, noils, woollen waste and rags. (*Communicated by Constant Schaller.*)	1198	25th April 1867	Clinton Edgcumbe Brooman.
Improvements in the treatment of fibrous materials and in apparatus to be used in such treatment.	1207	26th April 1867	John Watson Burton.
Improved machinery for burring wool, ginning cotton or other analogous purposes. (*Communicated by Robert J. Clay, James T. Husted, Ebenezer Gilbert Burling and Cornelius Corson.*)	1215	26th April 1867	William Edward Newton.
Treatment and preparation of raw silk - - (*Communicated by Jean Jacques Müller and Joseph Schetty.*)	1294	3rd May 1867	John Henry Johnson.
Bleaching textile materials or fibres, more especially wood pulp, for the manufacture of paper and pasteboard. (*Communicated by Jean Bernard Biron.*)	1403	11th May 1867	William Clark.
Improvements in the treatment and preparation of fibrous substances or vegetable matters as pulp for the manufacture of paper, and in apparatus for the same.	1455	17th May 1867	Julien Denis.
Improvements in machinery for washing wool, the said improvements being also applicable to other purposes. (*Communicated by Jonathan Holden.*)	1477	18th May 1867	Alexander Horace Brandon.
Machinery for washing and drying wool and other materials.	1486	18th May 1867	James Lee Norton.
Machinery for breaking or cutting flax, hemp, jute and other fibrous materials - - -	1507	21st May 1867	William Nichols. James Burnley. Thomas Wilson. George Jackson.
Manufacture or treatment of oakum or other fibrous substances for caulking ships and for other similar purposes.	1674	7th June 1867	Edwin Senior Atkinson.
An improved mixture or composition for bleaching vegetable fibres.	1712	11th June 1867	James Graham.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FIBRES, &c.—*continued.*			
Machinery for heckling or cleaning flax, hemp and other fibrous material, and for preparing the same for spinning.	1719	11th June 1867	William Rowan.
Manufacture of artificial hair - - - (*from animal fibres.*)	1841	24th June 1867	Henry Rushton.
Cotton gins - - - - - (*Communicated by Charles Spofford and Charles Henry Hersey.*)	1864	26th June 1867	William Robert Lake.
Metal ties or bands for securing bales of cotton or other substance. (*Communicated by Richard G. Latting.*)	1880	27th June 1867	William Robert Lake.
An improved method of and apparatus for extracting fatty matters from and for scouring wool and other fibrous substances and textile fabrics by the use of sulphuret of carbon, and for regaining the sulphuret used in such operation.	1887	28th June 1867	Charles Otto Heyl.
Batching or treating jute - - - -	1901	29th June 1867	Alexander Morrison Fell.
Machinery or apparatus for opening and cleaning cotton or other fibrous materials.	1923	2nd July 1867	John Greenhalgh.
Apparatus for drying grain, seeds, malt, spent hops, brewers' and distillers' grains, hops, wool, rags and other materials.	2071	13th July 1867	James Lee Norton.
Machinery for ginning cotton - - - (*Communicated by Charles Wilson Boyd.*)	2087	16th July 1867	William McAndrew.
Mode of treating flax, hemp and other fibrous plants for the purposes of spinning.	2104	18th July 1867	Nicholas John Oliver Stubber.
Improvements in producing and treating fibres from rags, and in apparatus for the same.	2163	25th July 1867	William Wood.
Machinery and apparatus for cleaning and preparing fibrous substances, and for opening twisted yarns and woven fabrics.	2219	1st Aug. 1867	Francis Alton Calvert.
Machinery or appararus for bowking, bleaching and cleansing textile fabrics and fibrous materials.	2243	3rd Aug. 1867	John Smith.
Construction of machines for splitting or for splitting and cutting sarsaparilla and other woody or vegetable fibrous substances. (*Communicated by Monsieur Gruvel, fils.*)	2310	12th Aug. 1867	Erembert Courtin.
Improvements in the method of and apparatus for treating certain vegetable substances in order to obtain fibrous materials and paper pulp therefrom. (*Communicated by Charles Gastaldetti and Joseph Vanzina.*)	2356	16th Aug. 1867	Michael Henry.
Treating products obtained when operating on wood and other vegetable substances to obtain fibre therefrom. (*see* "GAS.")	2370	17th Aug. 1867	Frederick Burnett Houghton.
Solvent or detergent processes - - -	2410	22nd Aug. 1867	James Garth Marshall.
Baling presses for pressing cotton and other substances.	2565	10th Sept. 1867	James Whittome.
Improvements in the treatment of jute and in oils or preparations for softening the fibres thereof.	2664	21st Sept. 1867	James Baird.
Treatment of cotton and other fibrous materials used in dentistry. (*Communicated by John Alexander McClelland.*)	2785	3rd Oct. 1867	Alexander Melville Clark.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FIBRES, &c.—*continued.*			
Improvements in the treatment of mixed fabrics and the extraction of wool therefrom, and in the construction of apparatus to be used for such treatment and for other purposes.	2803	5th Oct. 1867	George Martin.
Improvements in cleaning cotton and cotton seeds, and in the machinery or apparatus employed therein. (*Communicated by Felix Figon.*)	3048	29th Oct. 1867	John Henry Johnson.
Mats and matting - - - - (*fibres from refuse cane.*)	3092	2nd Nov. 1867	William Cooke. Walter Francis.
Cleansing wool and other animal fibres - -	3249	16th Nov. 1867	Read Holliday.
Machinery for opening and cleaning cotton and other fibrous substances.	3263	18th Nov. 1867	Edward Lord.
Improvements in the treatment of fibrous materials and in apparatus used therein.	3510	10th Dec. 1867	John Watson Burton.
A new or improved material to be employed in the manufacture of cord, rope, lace, paper, cardboard, pasteboard and other articles. (*obtaining fibres.*)	3520	11th Dec. 1867	Faustino Vita.
Improvements in the extraction of ammonia from fermented and other liquids, and in the regeneration of the agents used in such extraction. (*from waste waters of wool washing.*) (*Communicated by Armand Coste and Louis Taupin De Rosnay.*)	3566	14th Dec. 1867	Alexander Melville Clark.
Improvements in machinery for pressing cotton and for crushing and pressing other substances, the said machinery being adaptable for locomotion on railways or on common roads.	3635	21st Dec. 1867	Charles George Wilson.
Machinery for softening jute, hemp and similar fibrous materials - - - -	3643	23rd Dec. 1867	William Walton Urquhart. Joseph Lindsay.
Cotton ties used for banding or baling cotton and other substances. (*Communicated by John T. Butler.*)	3645	23rd Dec. 1867	William Walker.
The manufacture of a vegetable substitute for animal hair, from a product not hitherto used for that purpose. (*Communicated by Werner Staufen.*)	3707	31st Dec. 1867	Marc Antoine François Mennons.
Improvements in the preparation of floss silk and in the manufacture of ruches.	3715	31st Dec. 1867	Charles Grey Hill.

See also "SPINNING (*Opening*)."

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FILES AND CLIPS.			
Binders for papers and the like, which allow the whole or parts of the contents to be removed or exchanged.	1313	4th May 1867	Noah Mendal Shafer.
An eyelet and paper fastener combined - - (*Communicated by Edward Boynton.*)	2276	7th Aug. 1867	Charles McDermott.
An improved label band - - - -	3102	4th Nov. 1867	Arthur Armstrong Lock Harrison.
FILES AND RASPS.			
Improvements in files and in handles for holding the same. (*Communicated by Alfred Weed.*)	465	20th Feb. 1867	William Robert Lake.
Improvements in the manufacture of spoons, forks and other similar articles, and in apparatus or machinery to be employed therein, parts of which said apparatus or machinery are applicable to other manufactures. (*filing prongs.*)	1055	9th April 1867	Daniel Joseph Fleetwood.
Manufacture of files - - - - (*Communicated by Carl Gustaf Gustafsson.*)	1112	13th April 1867	George Tomlinson Bousfield.
Apparatus for sharpening the blades or knives employed in mowing and reaping machines. (*emery file.*)	2763	1st Oct. 1867	William Mitchell.
Improvements in the manufacture of file blanks and in the machinery or apparatus employed therein.	2972	22nd Oct. 1867	William Gray.
Machinery for the manufacture of files - -	2982	24th Oct. 1867	Aaron Chambers.
Machinery for cutting files - - -	2990	24th Oct. 1867	James Dodge.
FILTERING, PURIFYING AND CLARIFYING LIQUIDS; FILTERS; DISTILLING WATER, SOFTENING WATER.			
An improved mode of and apparatus for purifying the impure waters emanating from sugar factories and other industrial establishments, applicable also to the purification of sewage water.	119	17th Jan. 1867	Ernst Süvern.
Preparation of finings for fining or clearing fermented liquors.	130	18th Jan. 1867	Douglas William Hamper.
Constructing and working apparatus for filtering beer and other liquids.	330	6th Feb. 1867	George Arthur Walter.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FILTERING, &c.—*continued.*			
Improvements in apparatus for expressing or extracting liquids from substances containing the same, and in the manufacture of a fabric employed therein. (*Communicated by Theodore Poizot and Alphonse Druelle.*)	531	26th Feb. 1867	Clinton Edgcumbe Brooman.
Filtering presses for expressing the liquid parts and retaining the solid parts of any semi-liquid substances. (*Communicated by Pierre Du Rieux and Edouard Roettger.*)	587	2nd March 1867	Edward Thomas Hughes.
Improvements in or applicable to certain marine and stationary land boilers for generating steam. (*applying steam for distilling sea water.*)	626	6th March 1867	Edward Storey.
A new and improved means of preserving solutions of certain plants and matters in a concentrated state. (*for softening water for ablutions.*) (*Communicated by Clémence d'Estains, widow of Léon de Wailly.*)	684	11th March 1867	Henri Adrien Bonneville.
Filters - - - - - -	708	12th March 1867	John Fox.
Certain improvements in apparatus employed in the process of refining sugar.	1099	13th April 1867	John Aitken.
Brewers' mash tuns - - - - (*Communicated by James Walker.*)	1150	20th April 1867	John Millward.
An improved feeder or hopper for centrifugal sugar machines. (*Communicated by Helem Merrill.*)	1177	23rd April 1867	William Robert Lake.
A new metallic zinc paint - - - (*and alloys for filtering blocks.*)	1845	25th June 1867	James Webster.
Filtering apparatus - - - - (*Communicated by Albert Ludwig Georg Dehne.*)	1860	26th June 1867	William Edward Newton.
Apparatus for the aëration of fresh water obtained by the distillation of sea water. (*Communicated by Theodore Perroy.*)	2452	28th Aug. 1867	John Henry Johnson.
Portable apparatus for cleansing and filtering water for army and other purposes.	2564	10th Sept. 1867	James Rae.
Method of and materials for manufacturing ammunition boxes, pontoons, baggage and other waggons and carriages, and various equipments for military, naval and civil purposes. (*water cases with filter.*)	2630	19th Sept. 1867	Thomas Charles Clarkson.
Apparatus for separating soluble from insoluble matters, filtering the solutions, and if wished distilling these latter or parts of them.	2863	11th Oct. 1867	Eduard Leitenberger.
Improvements in treating sewage or other liquid matters so as to purify the more fluid portions thereof, and recover some of the contained matters for re-use in manufacturing processes, and in the preparation of others for use as manures (*filtering.*)	2894	15th Oct. 1867	Thomas Henry Baker. Thomas Woodroffe.
An improved portable distilling apparatus for producing fresh aërated water from sea water, part of which said apparatus is also applicable to the burning of hydrocarbon oils for other purposes.	3072	31st Oct. 1867	Alexander Chaplin.
Manufacturing of filtering paper - - -	3150	7th Nov. 1867	Ralph Robinson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FILTERING, &c.—*continued.*			
Apparatus for depurating or changing the condition of fluids in process of decantation - -	3315	23rd Nov. 1867	William Needham. James Kite.
Means for filtering syrup in the manufacture of sugar. (*Communicated by Joseph Edward Freund and Helem Merrill.*)	3417	2nd Dec. 1867	William Robert Lake.
Combination of materials to be used for filtering liquids.	3474	6th Dec. 1867	Cornelius Kerby.
Improved apparatus for filtering liquids - -	3503	10th Dec. 1867	Cornelius Kerby.
FINISHING, DRESSING, SINGEING, SHEARING, FOLDING AND PRESSING WOVEN FABRICS, YARNS, &c.; CUTTING FUSTIANS.			
Machinery or apparatus for folding fabrics, and also for folding and inserting cardboards, metallic plates or other substances between the folds of fabrics to be pressed.	12	2nd Jan. 1867	James Charles Ellison.
Improved apparatus for regulating, controlling and for varying the speed of shafts and machinery. (*calenders.*)	51	8th Jan. 1867	Robert Robinson.
A novel machine and preparation for dressing and finishing cloth. (*Communicated by Alphonse Porée.*)	86	12th Jan. 1867	William Edward Gedge.
A new and improved machine for dressing or waxing all kinds of thread. (*Communicated by Alfred Thiriez and Edouard Thiriez.*)	224	28th Jan. 1867	Henri Adrien Bonneville.
Improvements in apparatus and in the mode of operation for winding, tarring, sizing, polishing or putting a finish on and singling machine-spun and other yarns, in the manufacture of rope, cordage and lines of every description and material - - - - -	245	29th Jan. 1867	Hiram Craven. James Speeding.
A new method of scouring or cleansing raw wool and woollen stuffs. (*Communicated by Adolphe Philippe and Gustave Fortier.*)	257	30th Jan. 1867	Clinton Edgcumbe Brooman.
Treating and preparing silk - - - (*Communicated by Adolphe Philippe and Gustave Fortier.*)	264	31st Jan. 1867	Clinton Edgcumbe Brooman.
Starching or stiffening yarns, threads, woven fabrics and tissues. (*Communicated by John Gaspard Meyer-Rauschenbach.*)	340	6th Feb. 1867	Frederik Rosenauer.
An improved construction of tentering machine -	398	12th Feb. 1867	William Clissold.
Preparation of threads and the manufacture of fabrics from the threads so prepared. (*preparing for singeing.*) (*Communicated by Stanislas Vigoureux.*)	509	23rd Feb. 1867	Clinton Edgcumbe Brooman.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FINISHING, &c.—*continued.*			
Boiling and bleaching all kinds of textile fabrics and vegetable fibres and matters.	548	27th Feb. 1867	Murdoch Mackay.
Machinery for mangling or beetling fabrics - -	653	8th March 1867	Colin Mather.
Certain improvements in or applicable to sizing and dressing machines. (*for yarns in the hank.*)	673	9th March 1867	William Scowcroft Lowe.
Improvements in drying threads and fabrics, and in combining apparatus for that purpose. (*Communicated by Léon Jarosson and Albert Bastaert.*)	698	11th March 1867	William Clark.
Ironing, pressing, finishing and damping machinery	793	19th March 1867	James Moore Clements.
Treatment of wool and other animal textile materials, whether in a raw or manufactured state. (*Communicated by Jean Baptiste Frezo the elder.*)	861	25th March 1867	John Henry Johnson.
Improvements in finishing textile fabrics and in the machinery or apparatus connected therewith - - - - - -	1088	12th April 1867	William Robertson. James Guthrie Orchar.
Certain improvements in the method and apparatus for keeping warm glues, starches, gums and other liquids, which is also applicable for keeping other articles warm. (*in dressing and finishing.*)	1208	26th April 1867	Tempest Booth.
Making up tapes and other narrow fabrics - -	1242	29th April 1867	Robert Smith. Marcus Brown Westhead.
Manufacture of knitted fabrics - - -	1298	3rd May 1867	Samuel Thacker.
Machines for drying yarns, paper and fabrics -	1389	10th May 1867	James Johnson. Alfred Giles.
A machine or apparatus for removing the card-boards, metallic plates or other substances, from the folds of fabrics, used in the process of pressing.	1430	15th May 1867	James Charles Ellison.
Improvements in the manufacture of what are termed watered fabrics, and in apparatus connected therewith. (*see* "WEAVING.") (*Communicated by César Tavernier.*)	1555	25th May 1867	Alexander Melville Clark.
Improvements in stretching or tentering, and in dressing or finishing lace or other fabrics, and in machinery or apparatus employed therein -	1733	13th June 1867	Francis Bryan Baker. Leonard Lindley.
Apparatus for drying or finishing garments and fabrics after cleaning or dyeing.	1743	14th June 1867	George Ker.
An improved apparatus for winding bands or tapes	1872	27th June 1867	John Cash. Joseph Cash.
Improvements in the construction of elastic rollers for squeezing yarns and fabrics and for other purposes - - - - (*used in starching.*)	2174	27th July 1867	John Smith. William Schofield.
Apparatus for shrinking cloth - - -	2281	7th Aug. 1867	Thomas Stokes Cressey. John Webb.
An improved mode or improved means of colouring or ornamenting fabrics and other surfaces, and of preparing printing surfaces. (*Communicated by Charles Depoully.*)	2378	19th Aug. 1867	Clinton Edgcumbe Brooman.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FINISHING, &c.—*continued.*			
An improved compound or composition to be employed in sizing and finishing woven fabrics and yarns.	2490	3rd Sept. 1867	Alfred Leigh.
Winders suitable for folding or making up ribbon velvets for the market.	2542	7th Sept. 1867	Richard Wright Ewer.
Preparation or treatment of linen and cotton fabrics in order to adapt them to the manufacture of certain articles of wearing-apparel (*glazing.*)	2738	28th Sept. 1867	Alfred Ward. Charles George Virgo.
Machinery for clipping figured net and similar fabrics.	2914	17th Oct. 1867	Leopold Hamel.
Improved machinery for removing knots, burls and other extraneous fabrics from woollen cloth, flannel and other fabrics.	3011	25th Oct. 1867	Benjamin Cooper.
Improvements in doubling, folding or plaiting woven or other web fabrics, and in the machinery or apparatus employed therein or connected therewith.	3093	4th Nov. 1867	James Orr.
Machinery or apparatus employed in the clipping of lace and other fabrics.	3109	5th Nov. 1867	William Marshall.
Arranging tapes or other narrow fabrics in boxes or other receptacles for use - - -	3202	12th Nov. 1867	Marcus Brown Westhead. Robert Smith.
Machinery or apparatus for cutting woollen and cotton corduroy or other similar fabrics.	3372	28th Nov. 1867	William Cotton.
Improved machinery for folding and pressing the edges of elastics used in boots and shoes. (*Communicated by Antoine Guérin.*)	3375	28th Nov. 1867	Edward Thomas Hughes.
Improvements in machinery or apparatus for drying and stretching woven fabrics, paper or continuous lengths of other similar materials.	3401	30th Nov. 1867	Thomas Briggs, junior.
Improvements in preparing cloth and yarn to be dyed Turkey red, part of which improvements are applicable to bleaching yarn. (*and finishing yarn.*)	3419	2nd Dec. 1867	William Schofield.
Machinery for clamping and stretching woven fabrics.	3454	4th Dec. 1867	Frederic Jolly.
Improvements in finishing textile and other fabrics, and in the machinery or apparatus employed therefor.	3504	10th Dec. 1867	Robert Gillies Lowndes.
Improvements in the treatment of fibrous materials and in apparatus used therein. (*giving a face to felted fabrics.*)	3510	10th Dec. 1867	John Watson Burton.
A new or improved machine for rubbing, washing and sizing ropes, cords or twines.	3588	17th Dec. 1867	Saddleton Marsters.
Machinery for finishing woven fabrics - -	3612	19th Dec. 1867	Alexander Cochran.
Thread-polishing machines - - - -	3710	31st Dec. 1867	Gilbert M^{c}Culloch.

(*See also* "DRYING.")

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FIRE-ARMS, GUNS, ORDNANCE, GUN CARRIAGES, TARGETS, RIFLE PRACTICE.			
Breech-loading fire-arms and ordnance - -	10	2nd Jan. 1867	John Plews.
Improvements in rifles and ordnance for the purpose of instructing soldiers to fire with precision over long ranges, and for obtaining a correct register of the shooting by showing the result of each shot.	26	4th Jan. 1867	Frederick Robertson Aikman.
Breech-loading fire-arms - - -	28	4th Jan. 1867	Patrick Dagnall.
Breech-loading fire-arms - - -	33	5th Jan. 1867	Daniel Dowling. Charles Greves.
An improved self-acting safety gun lock - -	49	8th Jan. 1867	John Stanton.
Improvements in guns or cannon and in projectiles to be used therewith, also applicable to fire-arms generally and their projectiles - - -	56	9th Jan. 1867	William Jeremiah Murphy.
Breech-loading fire-arms - - -	59	9th Jan. 1867	James Henry Burton.
Improvements in fire-arms and ordnance, and in the cartridges or projectiles to be used therewith.	67	10th Jan. 1867	William Burnet Robins.
Improvements in breech-loading fire-arms and in cartridges for breech-loading fire-arms.	89	14th Jan. 1867	Walter Sandell Mappin.
Small arms - - - - - (*Communicated by Etienne Bonnin.*)	102	15th Jan. 1867	Henri Adrien Bonneville.
Breech-loading fire-arms - - -	112	16th Jan. 1867	Charles William Lancaster.
Improvements in fire-arms and ordnance, and in cartridges to be used therewith.	114	16th Jan. 1867	George Hookham.
Improvements in ships or vessels of war, part of which improvements are applicable to other ships or vessels. (*working the guns.*)	178	24th Jan. 1867	Fitzmaurice Palmer.
Fire-arms - - - - - (*Communicated by Sylvester Hayward Roper.*)	182	24th Jan. 1867	John Henry Johnson.
Improvements in guns, projectiles and cartridges, and in the construction of the same.	189	25th Jan. 1867	George Clark.
Certain improvements in breech-loading guns -	191	25th Jan. 1867	William James Hill.
Improvements in the construction, form and use and means of firing of projectiles, and in the construction and use and means of firing of ordnance and other arms.	213	26th Jan. 1867	Thomas Berney.
Breech-loading fire-arms - - -	222	28th Jan. 1867	John William Parker Field.
Improvements in breech-loading fire-arms, which improvements are applicable also to the conversion of muzzle-loaders into breech-loaders. (*Communicated by Mr. Lambert Jean Joseph Ghaye.*)	246	29th Jan. 1867	William Lloyd Wise.
An improved description of breech-loaded and needle-exploding fire-arms, and cartridge appropriate thereto.	251	30th Jan. 1867	Peter Ellis.
Chambers of breech-loading and other fire-arms and ordnance.	319	5th Feb. 1867	John Plews.
New or improved means or apparatus for opening and closing the passage through cylinders, applicable to fire-arms of every description. (*Communicated by François Felix Challeton de Breughat.*)	326	6th Feb. 1867	John Box.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FIRE-ARMS, &c.—*continued.*			
Gun and pistol locks	332	6th Feb. 1867	Thomas Rigby.
Certain improvements in breech-loading fire-arms	355	8th Feb. 1867	William Kilbee.
An improved self-acting safety gun lock	367	9th Feb. 1867	John Stanton.
Breech-loading fire-arms (*Communicated by Edmond Couturier.*)	392	12th Feb. 1867	John Henry Johnson.
Breech-loading fire-arms	395	12th Feb. 1867	Lieutenant Francis Bacon.
Fire-arms, ordnance and projectiles	399	13th Feb. 1867	Alexander John Paterson.
Improvements in breech-loading needle fire-arms, and in cartridges for the same. (*Communicated by Felix Allemano and Alberto Barelli.*)	445	19th Feb. 1867	George Frederick Redfern.
Improvements in breech-loading fire-arms, and in cartridges for the same. (*Communicated by Leon Lamblin Christian Lenders and Toussaint Theate.*)	447	19th Feb. 1867	Henry Haschke.
Breech-loading fire-arms	460	20th Feb. 1867	Augusto Albini. Francis Augustus Braendlin.
Breech-loading fire-arms and ordnance	468	21st Feb. 1867	John Bishop.
Improvements in breech-loading fire-arms, partly applicable to other arms.	480	21st Feb. 1867	James Fox Bland.
Improvements in the construction of breech-loading fire-arms, and in the cartridges to be used therewith	483	22nd Feb. 1867	Mowbray Walker. George Henry Money. Francis Little.
Breech-loading fire-arms	502	23rd Feb. 1867	Wynne Peyton Gray.
Breech-loading fire-arms	504	23rd Feb. 1867	Isaac Morris Milbank.
Breech-loading fire-arms	537	27th Feb. 1867	Joseph Rock Cooper.
Manufacture and construction of wheels (*for gun carriages.*)	567	28th Feb. 1867	George Fitzjames Russell.
Breech-loading fire-arms	594	2nd March 1867	William Rochester Pape.
Breech-loading fire-arms (*Communicated by Benjamin Stone Roberts.*)	599	4th March 1867	Marc Antoine François Mennons.
Repeating breech-loading fire-arms (*Communicated by Valentine Fogerty.*)	619	5th March 1867	George Haseltine.
Construction of breech-loading fire-arms (*Communicated by Henry Moore.*)	677	9th March 1867	Marc Antoine François Mennons.
Improvements in breech-loading fire-arms and in cartridges for the same. (*Communicated by Emile d'Erlanger.*)	717	13th March 1867	Marc Antoine François Mennons.
Breech-loading fire-arms	731	13th March 1867	Michael Frederick Halliday.
Breech-loading fire-arms (*Communicated by Benjamin Stone Roberts.*)	761	16th March 1867	Marc Antoine François Mennons.
Breech-loading fire-arms	768	16th March 1867	Thomas Shedden.
An improvement in breech-loading fire-arms (*Communicated by Silas Crispin.*)	769	16th March 1867	Alfred Vincent Newton.
Gun locks	781	18th March 1867	Joseph Smith.
Construction of ordnance	786	19th March 1867	John Cornish. Harcourt Sievier.
An improved breech-loading fire-arm	798	19th March 1867	Edward Lewis Sturtevant.
Apparatus for operating the extractor of breech-loading drop guns.	800	19th March 1867	John Portlock.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FIRE-ARMS, &c.—*continued.*			
Breech-loading fire-arms and bayonets for the same	863	25th March 1867	Andrew Wyley.
Breech-loading fire-arms and cartridges - - (*Communicated by Loughlin Conroy and Tristram Dodge Vanderveer.*)	866	25th March 1867	William Clark.
Locks for fire-arms - - - -	881	26th March 1867	Henry George Riggs.
Breech-loading fire-arms - - - -	901	27th March 1867	Josef Werndl.
Breech-loading fire-arms - - - (*Communicated by Joseph Auguste Cesar Brun.*)	913	28th March 1867	William Clark.
Improvements in breech-loading needle guns and in cartridges to be used therewith.	961	30th March 1867	Friedrich Hahn.
Improvements in fire-arms and in apparatus for charging the same.	962	30th March 1867	François Jules Manceaux.
Breech-loading fire-arms and cartridges - -	963	30th March 1867	Joseph Whitworth.
Fire-arms and cartridges - - - -	972	1st April 1867	Joseph Lewis. George Clark.
Revolving breech-loading fire-arms - - (*Communicated by William Herrick.*)	1007	3rd April 1867	William Robert Lake.
Improvements in breech-loading fire-arms and in cartridges for the same. (*Communicated by Jérome Flachat.*)	1023	5th April 1867	William Armand Gilbee.
Breech-loading fire-arms - - - - (*Communicated by Henry Huntington Wolcott.*)	1069	10th April 1867	William Robert Lake.
Breech-loading sporting guns - - -	1075	11th April 1867	Samuel Smith.
Breech-loading fire-arms - - - -	1100	13th April 1867	Kenneth Henry Cornish.
Improvements in breech-loading fire-arms, and in apparatus for closing and repriming cartridge cases for the same.	1138	17th April 1867	Thomas Horsley.
Improvements in breech-loading fire-arms, and likewise the cartridges and balls to be used therewith.	1143	18th April 1867	Edward Lindner.
Breech-loading fire-arms - - - -	1163	20th April 1867	John Webster Cochran.
An improved breech-loading needle rifle and improved cartridge. (*Communicated by Signor Francesco Glisenti.*)	1165	22nd April 1867	Cesar De Tivoli.
Breech-loading fire-arms - - - -	1167	22nd April 1867	Joseph Needham.
Improvements in the manufacture of gun barrels and ordnance, which improvements are also applicable to the manufacture of iron and steel tubes for various purposes.	1253	30th April 1867	John Marshall.
Breech-loading fire-arms - - - - (*Communicated by Monsieur Pierre Antoine Loron.*)	1255	30th April 1867	Charles De Grelle.
A new self-acting repeating rifle - - -	1259	1st May 1867	James Julius Kraffert.
Breech-loading revolving fire-arms - - (*Communicated by Reuben Drew.*)	1299	3rd May 1867	John Gustavus Rollins.
Breech-loading fire-arms - - - -	1339	7th May 1867	William Wellington Greener.
Friction coupling breaks applicable to hoisting apparatus and other purposes. (*to gun carriages.*)	1373	9th May 1867	Thomas Aldridge Weston.
Improvements in boring gun barrels and ordnance, and in apparatus used therein. (*Communicated by Joseph Jaspard.*)	1400	11th May 1867	John Piddington.
Breech-loading fire-arms - - - -	1446	16th May 1867	Charles Robert.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FIRE-ARMS, &c.—*continued.*			
Breech-loading fire-arms - - - - (*Communicated by William Wheeler Hubbell.*)	1449	16th May 1867	John Henry Johnson.
Breech-loading fire-arms and cartridges - -	1521	22nd May 1867	William Jeremiah Murphy.
Boring metals in the solid - - - - (*gun barrels, &c.*)	1550	24th May 1867	Thomas Greenwood.
Breech-loading fire-arms - - - - (*Communicated by E. S. Allin.*)	1612	30th May 1867	William Robert Lake.
Construction of revolving fire-arms - -	1625	1st June 1867	Thomas Poultney.
Breech-loading fire-arms - - - -	1626	1st June 1867	Thomas Poultney.
An improvement in breech-loading fire-arms and cartridges adapted to such arms.	1658	5th June 1867	Isaac Morris Milbank.
Improvements in the construction of breech-loading fire-arms, and in the manufacture and construction of cartridges for breech-loading fire-arms.	1664	6th June 1867	Thomas Wilson.
Breech-loading fire-arms - - - -	1670	7th June 1867	Amos Elvins.
Manufacture of gun-barrels - - -	1687	8th June 1867	Francesco Glisenti.
Improvements in guns, projectiles and cartridges, and in the construction of the same.	1757	15th June 1867	George Clark.
Breech-loading fire-arms - - - -	1785	18th June 1867	Joseph Lang.
Breech-loading cannon and fire-arms - -	1858	26th June 1867	Josiah Human.
Improvements in breech-loading fire-arms and in the manufacture of cartridges to be used therewith.	1873	27th June 1867	Ernest Farrington.
Breech-loading fire-arms - - -	1881	27th June 1867	Joseph Rock Cooper.
Breech-loading fire-arms - - - -	1904	29th June 1867	Samuel Trulock. Richard Trulock. William Trulock.
Breech-loading ordnance - - - (*Communicated by William Armstrong.*)	1926	2nd July 1867	Alexander Melville Clark.
Improvements in fire-arms and ordnance for the purpose of instructing soldiers, volunteers and others, with a short range only, to fire with precision over long ranges, and for obtaining a correct register of such shooting by showing the result of each shot.	1934	3rd July 1867	Frederick Robertson Aikman.
Breech-loading fire-arms - - - (*Communicated by Edwin Forbes Gunn.*)	1962	4th July 1867	William Edward Newton.
Improvements in breech-loading fire-arms and in cartridges and projectiles, a part of which improvements is also applicable for converting muzzle-loading fire-arms into breech-loading fire-arms.	1971	5th July 1867	James MacNaughton.
Breech-loading fire-arms - - - -	2040	11th July 1867	Edward Hohenbruck.
Entrenching tools to be carried on the stocks of fire-arms.	2120	20th July 1867	Kenneth Henry Cornish.
Breech-loading fire-arms - - -	2153	24th July 1867	Richard Brown Roden.
Improvements in breech-loading fire-arms and in cartridges - - - - -	2168	25th July 1867	Guillaume Laurent Barens. Jean Fructueux Ladougne.
Fire-arms - - - - - (*Communicated by Azel Storrs Lyman.*)	2216	31st July 1867	Clinton Edgcumbe Brooman.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FIRE-ARMS, &c.—*continued.*			
Breech-loading fire-arms - - - - (*Communicated by Theodore Yates.*)	2227	1st Aug. 1867	William Robert Lake.
Fire-arms - - - - -	2228	1st Aug. 1867	William Tranter.
Breech-loading fire-arms - - - -	2263	5th Aug. 1867	George Schneider.
Cartridges and fire-arms - - -	2277	7th Aug. 1867	Alexander John Paterson.
Breech-loading fire-arms - - - -	2328	13th Aug. 1867	Michael Frederick Halliday.
Fastenings for securing bayonets on fire-arms - (*Communicated by Paul Ambrose Oliver.*)	2335	14th Aug. 1867	Alexander Melville Clark.
Ordnance and machinery to be used in throwing projectiles, part of which machinery is applicable for other purposes.	2343	14th Aug. 1867	Henry Bessemer.
Apparatus for turning or closing cartridges for breech-loading fire-arms - - -	2369	17th Aug. 1867	James Willis Dixon, jun^{r}. William Buttery.
Uniting and treating iron, steel and other metals in sheets, plates, rails, bars, rods, links, bands, hoops, tubes or other formes, applicable to navigable vessels, forts, guns, bridges, roofs, floors, boilers, heaters, tanks, chests or like structures.	2376	19th Aug. 1867	William Bridges Adams.
Breech-loading fire-arms - - - -	2403	22nd Aug. 1867	John Newark.
Breech-loading fire-arms - - -	2477	31st Aug. 1867	William James Matthews.
Breech-loading fire-arms - - -	2488	3rd Sept. 1867	William Rochester Pape.
Breech-loading fire-arms - - - -	2513	5th Sept. 1867	Henry Carter. George Henry Edwards.
Breech-loading fire-arms - - - -	2587	12th Sept. 1867	Joseph Rock Cooper.
Method of and materials for manufacturing ammunition boxes, pontoons, baggage and other waggons and carriages, and various equipments for military, naval and civil purposes. (*gun carriages, beds for guns, &c.*)	2630	19th Sept. 1867	Thomas Charles Clarkson.
Fire-arms - - - - -	2672	21st Sept. 1867	Joseph Rock Cooper.
Apparatus for extracting cartridge cases from breech-loading fire-arms.	2725	27th Sept. 1867	Robert Adams.
Breech-loading fire-arms - - - (*Communicated by Hubert Comblain.*)	2778	2nd Oct. 1867	Henri Haschke.
Breech-loading fire-arms - - - -	2846	10th Oct. 1867	Cyrus Avery.
An improved mode of preparing iron for the manufacture of various articles where great strength and capability of resistance to tensile strain or torsion is required. (*for ordnance, gun barrels, &c.*) (*Communicated by Michel Pawlowitch Lwoff.*)	2865	11th Oct. 1867	William Edward Newton.
Apparatus or machinery for loading heavy ordnance with balls, shells or other projectiles. (*Communicated by James Buchanan Eads.*)	2887	14th Oct. 1867	William Robert Lake.
Improvements in fire-arms and ordnance, and in cartridges for the same and for other fire-arms and ordnance - - - - -	2923	18th Oct. 1867	Henry William Garrett. George Holcroft.
Breech-loading fire-arms - - - (*Communicated by Samuel Norris.*)	2941	19th Oct. 1867	William Robert Lake.
Apparatus for discharging projectiles from vessels or forts below the water line. (*Communicated by George Ingle.*)	2949	19th Oct. 1867	Richard Watkins.
Construction of breech-loading revolver fire-arms -	2961	22nd Oct. 1867	John Adams.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FIRE-ARMS, &c.—*continued.*			
Improvements in fire-arms and ordnance, and in projectiles therefor.	3039	28th Oct. 1867	The Honble. Herbert George Phillip Meade.
Breech-loading fire-arms - - -	3075	1st Nov. 1867	Richard Brown Roden.
Breech-loading fire-arms - - - (*Communicated by John Webster Cochran.*)	3189	11th Nov. 1867	William Robert Lake.
Improvements in the construction of breech-loading fire-arms, and in the manufacture and construction of cartridges for breech-loading fire-arms.	3211	13th Nov. 1867	Thomas Wilson.
Breech-loading fire-arms - - - - (*Communicated by Samuel Norris.*)	3214	13th Nov. 1867	William Robert Lake.
Breech-loading fire-arms - - -	3216	13th Nov. 1867	Robert Adams.
An improved tubular cannon - - -	3241	15th Nov. 1867	Ernest Farrington.
Breech-loading fire-arms - - -	3256	16th Nov. 1867	John Ernest Richter.
Mounting and working ordnance - - -	3278	19th Nov. 1867	Robert Anthony Edwards Scott.
Breech-loading fire-arms and cartridges - -	3301	21st Nov. 1867	William Jeremiah Murphy.
Improvements in apparatus for rendering innocuous the momentum of heavy bodies so as to prevent injury and damage from concussion, applicable to ships' cables, cranes, windlasses, capstans, hoists, lifts, weighing machines, ship and fort armour, to training guns, to railway trains, station buffers, fenders to pier-heads, gangways, breakwaters and other similar structures, which apparatus is also applicable for storing and accumulating power, which may be used for throwing projectiles, raising or moving heavy weights, such as ships, stranded or sunken vessels, propelling carriages and other purposes.	3302	21st Nov. 1867	William Graham McIvor.
An improved apparatus by which central-fire breech-loading fire-arms may be converted into muzzle-loaders at pleasure, and which also forms an indestructible cartridge case - -	3308	22nd Nov. 1867	John Wormald. William Bell Dalton.
An improved mode of and apparatus or means for killing whales. (*using explosive shells.*)	3312	22nd Nov. 1867	George Welch.
Improvements in breech-loading fire-arms and in cartridges for the same. (*Communicated by La Société Industrielle Suisse.*)	3324	23rd Nov. 1867	John Henry Johnson.
Improvements in breech-loading fire-arms and in cartridges for the same. (*Communicated by Silvanus Frederic Van Choate.*)	3345	26th Nov. 1867	William Robert Lake.
Breech-loading fire-arms - - - -	3409	30th Nov. 1867	Richard Clay the younger.
Construction of breech-loading ordnance - -	3453	4th Dec. 1867	Eli Walker.
Construction of breech-loading fire-arms - -	3492	7th Dec. 1867	Robert Warry.
Improvements in ordnance and in projectiles used therewith, as also in the processes employed in their manufacture.	3507	10th Dec. 1867	William Palliser.
Fire-arms and cartridges - - - -	3539	12th Dec. 1867	Westley Richards.
An improved tubular cannon for firing vollies or charges of grape shot - - -	3553	13th Dec. 1867	Louis Christophe. Joseph Montigny.
Improvements in guns, projectiles and cartridges, and in the construction of the same.	3562	14th Dec. 1867	George Clark.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FIRE-ARMS, &c.—*continued.*			
Breech-loading fire-arms - - - - -	3616	19th Dec. 1867	James Kerr.
Construction of cannon and other fire-arms -	3642	23rd Dec. 1867	Charles William Lancaster.
For ammunition, *see* "CARTRIDGES."			
,, "GUNPOWDER."			
,, "SHOT."			
FIRE-ENGINES; FIRE-ESCAPES; EXTINGUISHING FIRES.			
Water delivery "nozzles" employed in the extinction of fire. (*Communicated by William Barbour.*)	36	5th Jan. 1867	Edward Kenworthy Dutton.
Portable fire-escapes - - - - -	572	1st March 1867	Ralph Augustine Jones. John Cooper Hedges.
Apparatus for raising, forcing, propelling and exhausting fluids and gases. (*applicable to fire-engines.*)	686	11th March 1867	William Bryer Nation.
Rotary engines and pumps - - - (*steam fire-engine.*) (*Communicated by Dexter Davis Hardy.*)	755	15th March 1867	William Robert Lake.
Improvements in steam fire-engines and boilers, such improvements being applicable to other purposes.	772	16th March 1867	James Shand.
Apparatus for extinguishing fires - - (*Communicated by François Carlier.*)	1014	4th April 1867	Edward Casper.
Improvements in apparatus to be used for towing ships or vessels, and in apparatus for laying submarine telegraph cables. (*or pumping water for extinguishing fires.*)	1015	4th April 1867	James Maze Kilner.
An improved lifting machine applicable as a fire-escape and for repairing and decorating houses and other buildings.	1025	5th April 1867	Edward Beningfield.
Fire-escapes - - - - - -	1139	18th April 1867	John Scott.
An improved fire-escape, parts of which are applicable to the ventilation of buildings and the extinguishing of fire therein - - -	1418	13th May 1867	Martin Dadd Rogers. Joseph Wilson.
A process for extinguishing fires by means of cartridges composed of the most improper materials to combustion, diluted in water, for projecting on fire.	1542	24th May 1867	Jean Marie Muterse.
Improvements in apparatus and in the means employed for subduing and extinguishing fires, partly applicable to other useful purposes.	1614	31st May 1867	John Scott.
Construction of hand garden engines and hydropults.	1640	3rd June 1867	Robert William Page.
A new or improved fire-escape - -	1745	15th June 1867	James Quin.
Machinery or apparatus for raising and forcing water and other fluids - - - - (*fire-engine.*)	1828	22nd June 1867	Thomas Wilson. William Hall.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FIRE-ENGINES, &c.—*continued.*			
Improvements in fire-escapes, the same being suitable for ascending and descending mines or other deep places, and at other times convertible into a piece of furniture, such as a couch, ottoman, chair, table or other similar article.	2069	13th July 1867	John Scott.
A new apparatus and method for the saving of life and property from fire.	2083	16th July 1867	Henry Grattan Dunn.
An improved chemical mixture or compound for extinguishing fires and destroying explosive fire-damp in coal mines.	2200	30th July 1867	Joseph Jones.
Fire-escapes - - - - -	2354	16th Aug. 1867	George Clarke.
Means of and apparatus for the preservation of life from fire, and for raising or lowering persons or goods from buildings.	2385	20th Aug. 1867	Walter Dixon.
Ladders suitable for fire-escapes and other purposes	2498	4th Sept. 1867	George Smith.
Fire-escapes - - - - -	2509	5th Sept. 1867	Ralph Augustine Jones. John Cooper Hedges.
Fire-escapes and ladders - - - -	2586	12th Sept. 1867	Christopher Oates.
An improved lifting machine applicable as a fire-escape, and for repairing and decorating houses and other buildings.	2824	8th Oct. 1867	Edward Beningfield.
Construction of hand garden engines and hydropults.	3423	2nd Dec. 1867	Robert William Page.
A self-acting fire alarm and extinguisher - -	3647	23rd Dec. 1867	Charles John Adams.
FIRE-PLACES, GRATES AND STOVES; FENDERS AND FIRE GUARDS.			
Improvements in making moulds for casting fenders and in fitting bottoms to fenders, which improvements in making moulds for casting fenders may also be applied to the making of moulds for casting other articles - -	139	19th Jan. 1867	James Bate. George Asher.
Improvements in the heating of malt kilns and other apparatus of a similar character, and the warming of the interiors of churches and other large buildings, which invention is also applicable to causing the consumption of smoke from open fire-places.	249	30th Jan. 1867	Thomas Prideaux.
Fire-grates and furnaces - - - -	270	31st Jan. 1867	Archibald Craig.
Cinder and other shovels - - -	419	15th Feb. 1867	Richard George.
Improvements in gas-cooking apparatus, and in steaming, baking, boiling and roasting apparatus	439	18th Feb. 1867	William Hill. Henry Charles Wilberforce.
Stoves or fire-places - - - -	590	2nd March 1867	Edward Thring.
Fire ranges for dwelling houses - - -	635	7th March 1867	Edward Knowles Heaps. Thomas Parkin Moorwood.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FIRE-PLACES, &c.—*continued.*			
Improvements in supplying heated air to furnaces and fires, and in apparatus connected therewith, which apparatus is also applicable to burning smoke - - - - - -	741	14th March 1867	William Hamer. Joseph Davies.
Certain improvements in furnaces or fire-places -	867	26th March 1867	Thomas Wrigley.
Improvements in gas fire-places and gas stoves, and in apparatus for heating conservatories and other rooms.	936	29th March 1867	Edwin William Ball.
Construction of register or other open fire-grates -	1061	9th April 1867	Thomas Redmayne. John Sibrey.
Kitchen ranges - - - - - -	1103	13th April 1867	John Jobson.
A combined gas lighting and cooking apparatus -	1191	24th April 1867	Thomas South.
Improvements applicable to kitchen ranges, part of which improvements is also applicable for the prevention of down draught in other fire-places.	1305	4th May 1867	Robert Russell.
Fire grates - - - - - -	1648	4th June 1867	James M^{c}Owen.
A new oil or gas stove - - -	1653	5th June 1867	Thomas Harvey Saunders.
Improvements in open fire-places and stove grates, for the purpose of economizing fuel and securing a more perfect combustion.	2154	24th July 1867	Thomas Prideaux.
Kitchen ranges - - - -	2274	6th Aug. 1867	Moses Jones.
Kitchen or cooking ranges - - -	2329	13th Aug. 1867	John Badger.
Means of ventilating and regulating the draught of close fire ranges or kitcheners.	2461	29th Aug. 1867	Joseph Douglas.
Fire grates - - - - - -	2494	3rd Sept. 1867	Edward Young Robbins.
Fire guards and fire screens - - -	2589	13th Sept. 1867	Hermon Symons.
A new or improved method and apparatus for converting the gaseous products of combustion into combustible gases. (*Communicated by Nicolas Lebedeff.*)	2694	25th Sept. 1867	Charles Denton Abel.
Apparatus or arrangements for warming and ventilating buildings.	2701	25th Sept. 1867	William Woodcock.
Improvements in furnaces, fire-places and fire-bars, for the consumption of smoke and gases arising from products, and the non-consumption of fire-bars.	2757	1st Oct. 1867	Thomas Bird.
Improvements in stoves for consuming gas and other fuel, and in ovens to be used therewith -	2873	12th Oct. 1867	Richard Canham. James Thomson.
Furnaces and fire grates - - - -	2880	14th Oct. 1867	John Charles Pearce.
Kitchen ranges - - - - - -	3327	25th Nov. 1867	Frederick Brown.
Stoves - - - - - - -	3717	31st Dec. 1867	Nathan Smith.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FIRE-WORKS.			
Manufacture of explosive and fulminating powders (*for pyrotechny.*)	3469	5th Dec. 1867	Paul Gustave Louis Gabriel Designolle. John Casthelaz.
FISHING; FISHING NETS, FISH HOOKS, OYSTER RAKES.			
A two branched or double hooked fish-hook (*Communicated by François Angilard, jun'.*)	150	21st Jan. 1867	William Edward Gedge.
Apparatus for catching fish	1146	18th April 1867	William Wilkinson.
An improved method of capturing fish	1331	7th May 1867	Shakleton Edward Hallett.
Improved trawl nets suitable for the capture of salmon and other fresh water fish in the fresh water portion of rivers and other running waters.	1332	7th May 1867	Shakleton Edward Hallett.
An improved method of capturing salmon and other fish in rivers and inland waters.	1333	7th May 1867	Shakleton Edward Hallett.
Submarine tongs for gathering oysters and other articles.	1438	15th May 1867	Job Johnson.
Swivels for fishing tackle and for other purposes	1765	17th June 1867	Joseph Welch.
Manufacture of nets and netting (*Communicated by Benjamin Arnold and William John Hooper.*)	2140	23rd July 1867	John Henry Johnson.
Machinery to be employed in the manufacture of fish hooks	2479	31st Aug. 1867	Albert Fenton James Sandilands.
Certain improvements in the manufacture of fish-hooks.	2714	26th Sept. 1867	Abel Morrall.
An improved mode of and apparatus or means for killing whales.	3312	22nd Nov. 1867	George Welch.
Improved appliances and means for conveying salt-water fish through fresh water and overland and on land. (*Communicated by Adolphe Smidth.*)	3548	13th Dec. 1867	Leopold Auguste Damm.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FLUES AND CHIMNEYS; CHIMNEY TOPS; CURING SMOKY CHIMNEYS; CHIMNEY WIND GUARDS.			
Improvements in chimney tops for the prevention of smoky chimneys.	183	24th Jan. 1867	Daniel Sutcliffe Chater.
Chimney-tops - - - - -	275	1st Feb. 1867	John Alexander Murray.
An improved construction of chimney top or cap -	423	15th Feb. 1867	Jasper Capper.
Certain improvements in boilers or steam generators.	609	5th March 1867	Thomas Beeley.
Certain improvements in apparatus applicable for the prevention of smoke.	762	16th March 1867	John Grundy.
Steam-engines and boilers - - -	771	16th March 1867	Edward Ellis Allen.
Improvements in means or apparatus employed in the cure of smokey chimneys, and in ventilating buildings and other places - - -	941	30th March 1867	Richard Canham. William Kreut.
An improved method of consuming smoke in furnaces - - - - - -	1153	20th April 1867	William Harrison.
Improvements applicable to kitchen ranges, part of which improvements is also applicable for the prevention ofdown draught in other fire-places.	1305	4th May 1867	Robert Russell.
Steam-boilers and the method of construction of the same.	1584	29th May 1867	Richard Pollit.
An apparatus for the purpose of giving sufficient draught to any kind of chimney.	1613	31st May 1867	Floribert Joseph Demanet.
Fitting the tubes in flues of Cornish and other steam-boilers - - - -	1678	7th June 1867	William Wilson Wood. John Wood.
Construction of steam-boilers - - - (*forming the flues.*)	1706	10th June 1867	Thomas Holt.
An improved combination of materials to be used in the manufacture of "drain bottoms," flue slabs, bricks and other like purposes.	1732	13th June 1867	John Holmes.
Construction of chimney tops - - -	1990	8th July 1867	Jasper Capper.
Arrangement of the flues of certain boilers for generating steam.	2009	9th July 1867	James Credland.
Scrapers for cleaning boiler tubes - - -	2086	16th July 1867	James Mannock.
Steam generators and condensers - - -	2097	17th July 1867	John Slater.
Improvements in open fire-places and stove-grates, for the purpose of economising fuel and securing a more perfect combustion.	2154	24th July 1867	Thomas Prideaux.
Hot-blast stoves - - - - -	2182	27th July 1867	Humphrey Chamberlain.
Kitchen ranges - - - - -	2274	6th Aug. 1867	Moses Jones.
Apparatus to be applied to chimney tops - -	2297	9th Aug. 1867	Caroline Hohgrefe.
Apparatus for the regulation of up and down currents of air in shafts or chimneys.	2677	23rd Sept. 1867	William Cooke.
An improvement in the construction of furnaces, flues and vessels which are subjected to high temperatures - - - - -	2782	3rd Oct. 1867	Henry Davis Pochin. Edward Hunt.
Improved methods of constructing steam generators for engines, new furnaces connected therewith, and the mode of working them, with machinery in combination with the uses to which they are applicable. (*and flues.*)	2792	4th Oct. 1867	Henry Pinkus.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FLUES, &c.—*continued.*			
An improved apparatus for the prevention or consumption of smoke in the furnaces and flues of steam-boilers - - - - -	2825	8th Oct. 1867	John Dean. Thomas Turton.
Steam-boilers - - - - -	2857	11th Oct. 1867	John Charles Wilson.
Method of and apparatus for heating (*regulating draft in flues.*) - -	2862	11th Oct. 1867	Robert Alfred Wright.
An improved mode of and apparatus for cleaning boiler tubes.	3059	30th Oct. 1867	The Right Honourable James Earl of Caithness.
Steam-boilers - - - - -	3070	31st Oct. 1867	Isaiah Kendrick.
Cowls or guards for chimney and other like shafts	3300	21st Nov. 1867	Walter Blundell.
An improved cowl for chimney tops - - -	3623	20th Dec. 1867	Edward Fields. Frederic Pelham Warren.
Construction of chimney tops or caps - -	3686	28th Dec. 1867	Jasper Capper.
FOOD FOR CATTLE; FODDER-CUTTING; CHAFF-CUTTING; ROOT-PULPING.			
Preparing turnips and mangel wurzel for the food of animals.	734	14th March 1867	Hugh Smith.
Preparing turnips and mangel-wurzel for food of animals.	1204	25th April 1867	Hugh Smith.
Hay and chaff cutting machines - - -	1263	1st May 1867	John Howell.
Construction of machinery for preparing and mixing food for pigs and other animals.	1385	10th May 1867	Ralph Mellard.
Boilers for boiling or steaming roots, and for heating water for other purposes - -	1497	20th May 1867	Valentine Barford. John Skerman.
Turnip or root-cutting machines - - -	1535	23rd May 1867	Edward Howell. Thomas Hardy.
An improved food for sheep and other animals -	1580	28th May 1867	William Mitchell.
Portable chaff-cutting machinery - -	1665	6th June 1867	Robert Maynard.
Improved apparatus for extracting oils from oleaginous seeds and nuts, and making oil cake or compound cake for cattle feeding.	2331	13th Aug. 1867	John Fawcett.
Machinery for cutting, crushing, bruising, or otherwise preparing furze or gorse, straw, bark or other vegetable substances.	2373	17th Aug. 1867	Wallis Rivers Goulty.
An improved process and apparatus for instantaneously disinfecting fecal and manuring matters, improving the same, and also rendering them fit for feeding domestic animals. (*Communicated by Louis Jean Baptiste Alphonse Lemoine and Antoine Marius Turrell.*)	2549	9th Sept. 1867	Frederick Tolhausen.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FOOD FOR CATTLE, &c.—*continued.*			
Improved apparatus for regulating the supply of food to cattle, sheep and other animals. (*see* "STABLES.")	3010	25th Oct. 1867	Peter Love.
Improvements in breaks for railway and other carriages, and in signalling and other apparatus in connection therewith, which improvements are also partly applicable to other purposes. (*to rotary chaff cutters.*)	3597	18th Dec. 1867	Thomas Comfield the younger.
FORTIFICATIONS, BATTERIES, SHIPS OF WAR, GUN-BOATS, ARMOUR-PLATED SHIPS.			
Improvements in constructing quays, jetties, piers, sea walls and breakwaters, in the formation of reservoirs, docks, basins, coast harbours, harbours of refuge, lighthouses and sea batteries, applicable also for the reclamation of land and for the building of bridges.	79	11th Jan. 1867	Henry Buss.
Improvements in ships or vessels of war, part of which improvements are applicable to other ships or vessels.	178	24th Jan. 1867	Fitzmaurice Palmer.
Improvements in constructing and applying defensive armour and also bullet proof porthole covers for the defence of ships and other vessels, forts, batteries and other fortifications, parts of which improvements are applicable to other purposes.	193	25th Jan. 1867	Thomas Berney.
Improvements in the construction of armour plates, or in the method of fixing the same to ships, forts, turrets and other similar structures, part (or parts) of which improvements are applicable to other purposes.	308	4th Feb. 1867	Sir John Benson (Knight).
Uniting iron and steel in sheets, plates, rails, bars, rods, links, bands, hoops, tubes or other forms, applicable to navigable vessels, forts, bridges, roofs, floors, tanks or chests.	469	21st Feb. 1867	William Bridges Adams.
Manufacture of ships' sheathing, armour sheathing and fastenings.	856	23rd March 1867	Joseph Betteley.
Covering and protecting ships, forts and buildings	903	28th March 1867	William Richard Dawson. John Bailey Davies.
Improvements in apparatus to be used for towing ships or vessels, and in apparatus for laying submarine telegraph cables. (*or piercing hostile ships.*)	1015	4th April 1867	James Maze Kilner.
Armour plating and sheathing of ships of war and fortifications.	1082	11th April 1867	Theodore Anthony Rochussen.
Improvements in the manufacture of screws chiefly applicable for fixing armour plates.	1089	12th April 1867	Henry Patterson Boyd.
Turrets and broadsides of ships of war - -	1176	23rd April 1867	Joseph Westwood.
Construction of fortifications - - -	1271	2nd May 1867	John Brown.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FORTIFICATIONS, &c.—*continued.*			
Improvements in the construction of landing stages and iron ships or vessels, also in propelling and steering ships or vessels generally. (*ships of war.*)	1309	4th May 1867	Evan Leigh.
Construction of armour-plated ships and batteries -	1417	13th May 1867	James William Butler.
Construction of ships and boats - - - (*ships of war.*)	1434	15th May 1867	Francis Bonney.
Manufacture of artificial granite and other artificial bricks and blocks suitable for buildings, engineering structures, pavements and other similar purposes. (*for fortifications.*) (*Communicated by Pierre Rodolphe Pozzi.*)	1458	17th May 1867	Perceval Moses Parsons.
Improvements in the construction of a steam vessel suitable for ferrying laden trains across the ocean, complete, together with its landing places, breakwaters, and modes of protection from marine insects and fouling, which improvements are also generally applicable to other vessels, and to the protection of iron and wood exposed to the action of the sea water. (*applicable to vessels of war.*)	1503	21st May 1867	Edward Henry Cradock Monckton.
Uniting and treating iron, steel and other metals in sheets, plates, rails, bars, rods, links, bands, hoops, tubes or other formes, applicable to navigable vessels, forts, guns, bridges, roofs, floors, boilers, heaters, tanks, chests or like structures.	2376	19th Aug. 1867	William Bridges Adams.
Construction and mode of propelling and maneuvering floating batteries and other vessels intended for the purposes of naval defence and attack.	2743	28th Sept. 1867	John Elder.
An improved mode of preparing iron for the manufacture of various articles where great strength and capability of resistance to tensile strain or torsion is required. (*armour plates.*) (*Communicated by Michel Pawlowitch Lwoff.*)	2865	11th Oct. 1867	William Edward Newton.
Improvements in revolving batteries and in the means for working the same. (*Communicated by James Buchanan Eads.*)	2888	14th Oct. 1867	William Robert Lake.
Apparatus for discharging projectiles from vessels or forts below the water line. (*Communicated by George Ingle.*)	2949	19th Oct. 1867	Richard Watkins.
Improvements in plating or protecting ships of war, fortifications and other like structures, and the manufacture of the plates employed therefor.	3003	25th Oct. 1867	Gustave Julius Günther.
Manufacture of armour plates - - -	3019	26th Oct. 1867	Francis Montagu Smith.
Construction of armour for the defence of ships, forts, batteries and other constructions.	3145	7th Nov. 1867	Edward Sacré.
Defensive armour for war vessels and forts - (*Communicated by Obadiah Marland.*)	3185	11th Nov. 1867	William Robert Lake.
Manufacture of artificial granite suitable for buildings, engineering structures, pavements and other similar purposes. (*for fortifications.*) (*Communicated by Pierre Rudolph Pozzi.*)	3234	15th Nov. 1867	Perceval Moses Parsons.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FORTIFICATIONS, &c.—*continued.*			
Improvements in apparatus for rendering innocuous the momentum of heavy bodies so as to prevent injury and damage from concussion, applicable to ships' cables, cranes, windlasses, capstans, hoists, lifts, weighing machines, ship and fort armour, to training guns, to railway trains, station buffers, fenders to pier-heads, gangways, breakwaters and other similar structures, which apparatus is also applicable for storing and accumulating power, which may be used for throwing projectiles, raising or moving heavy weights, such as ships, stranded or sunken vessels, propelling carriages and other purposes.	3302	21st Nov. 1867	William Graham McIvor.
Merchants' ships and other vessels and appliances connected therewith. (*protecting from shot.*)	3331	25th Nov. 1867	George Bell Galloway.
FUEL; TREATING COAL; PREPARING FIRE-WOOD; FIRE-LIGHTERS.			
Manufacture of artificial fuel - - -	32	4th Jan. 1867	James Bird.
Improvements in the construction of apparatus for mixing, pressing and moulding coal and other substances for the formation of artificial fuel, and dividing the same into blocks, such apparatus being also applicable to other analogous operations.	123	17th Jan. 1867	David Barker.
Improvements in the production of illuminating gas, and in the manufacture and application or use of new or improved materials or fuels for the same, and in the means or apparatus employed therefor.	164	22nd Jan. 1867	John Patison.
An improved means of and apparatus for lighting fires.	258	30th Jan. 1867	John Fretcheville Dykes Donnelly.
An improvement in the manufacture of fire lighters and artificial fuel - - -	309	4th Feb. 1867	Samuel Plant. William Tatton.
Means or apparatus employed to secure coal plates, trap doors and other similar articles.	436	16th Feb. 1867	Ebenezer Stephens.
Treatment of peat - - - - - (*for fuel.*)	512	25th Feb. 1867	Eugène Chepron.
A new or improved fagot or fire-lighter - -	540	27th Feb. 1867	Thomas Humphreys.
Improvements in the means and apparatus for producing oxygen, and in the application of the same for metallurgical and other purposes. (*Communicated by Henri Adolphe Archereau.*)	568	28th Feb. 1867	William Clark.
Improvements in the smelting and treatment of iron and other ores, in the fuel and other materials made use of in such treatment, and in apparatus for supplying the same to blast, puddling, and any other furnaces and fires in or by which great heat is required to be generated, parts of which improvements are applicable also to other purposes - - - - -	922	29th March 1867	Enoch Harrison Aydon. Edward Field.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FUEL, &c.—*continued.*			
Improvements in utilizing the heating properties of petroleum and other liquid hydrocarbons and oils, and in apparatus employed therefor -	930	29th March 1867	Arthur Barff. Joshua Kidd.
Manufacture of artificial fuel - - -	935	29th March 1867	James Bird. James Bird.
Apparatus for the manufacture of bricks, tiles and other articles of plastic material. (*moulding fuel.*) (*Communicated by Frederick Hertel.*)	954	30th March 1867	William Clark.
A new and improved means of readily igniting fuel and lighting fires. (*Communicated by Arsène de Pillon de St. Paul.*)	974	2nd April 1867	Henri Adrien Bonneville.
Burning petroleum, creosote, gas tar, and other such fluid bodies capable of being used as fuel.	998	3rd April 1867	John Augustus Bouck.
Apparatus for breaking down coal, stone and other minerals. (*Communicated by Theophile Guibal.*)	1137	17th April 1867	William Cochrane.
Improvements in apparatus for applying concentrated heat, and suitable for lighting fires, brazing and similar uses. (*see* "AIR-SUPPLYING.")	1149	20th April 1867	John McKechnie.
Apparatus for burning petroleum and other combustible fluids. (*see* "FURNACES.")	1180	23rd April 1867	Samuel Joseph Mackie.
Improvements in the treatment of peat and in the manufacture of peat charcoal, and in the machinery or apparatus employed therein. (*charcoal used as fuel.*) (*Communicated by Augustus Figge.*)	1190	24th April 1867	John Henry Johnson.
Revolving screens for screening coal and other materials.	1282	2nd May 1867	Charles Dutton.
Brick-making machines - - - - (*and moulding fine coal, peat, &c.*) (*Communicated by John Scott Meredith and John Hanson Mitchell.*)	1393	10th May 1867	William Clark.
Improvements in burning all hydrocarbon oils, such as creosote, petroleum, paraffin oil, shale oil, gas tar, and other similar products capable of being used as fuel.	1487	20th May 1867	Thomas Metcalf.
Construction of chambers for drying artificial fuel and other substances.	1638	3rd June 1867	David Barker.
Manufacture of artificial fuel - - -	1652	5th June 1867	Nicolas Rausch. Edme Léon Darlet.
Manufacture of artificial fuel - - -	1713	11th June 1867	Henry Fletcher.
Manufacture of coal vases, buckets, casks, kegs, bins, baths, sugar funnels and other similar articles of hollow ware.	1786	19th June 1867	David Jones.
Manufacture of bails or handles for articles or vessels of hollow ware. (*for coal vases.*)	1797	20th June 1867	David Jones.
Apparatus for moulding artificial fuel - -	1830	22nd June 1867	Sydney Hall. William Henry Parsons.
Improved machinery for making bricks for building and other purposes, and of coal, peat or other substances to be used as fuel.	2028	10th July 1867	George Roughton Bromage Amott.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FUEL, &c.—*continued.*			
An improved compound to be used for igniting fires.	2055	12th July 1867	Adolphus Edward Herrmann.
Apparatus for the manufacture of artificial fuel, which apparatus may also be employed for other purposes.	2065	13th July 1867	Henry Fletcher.
An improved method of lighting house and other fires - - - - - -	2188	29th July 1867	William Lawrence Lowe Leaver. Aaron Smalley.
Fire lighters also applicable for fuel generally -	2377	19th Aug. 1867	John Hooker. Frederick Braby.
Treatment of seaweed for obtaining valuable products from it. (*charcoal for fuel.*)	2436	26th Aug. 1867	Edward Sonstadt.
Apparatus for applying concentrated heat, and suitable for lighting fires, brazing and similar uses.	2491	3rd Sept. 1867	John McKechnie.
The manufacture of artificial or compressed fuel in the treatment of coal, peat, charcoal, tan, sawdust and woody fibre, whereby those substances either together or separately, can be utilized when in a state of powder or minute division, and converted into a serviceable fuel.	2577	11th Sept. 1867	Henry Richard Lückes.
Fire lighters and fire revivers - - -	2614	17th Sept. 1867	John Clowes Bayley. Daniel Campbell.
Manufacture of faggots or fire lighters - -	2620	17th Sept. 1867	Thomas Stevenson.
Separating pyrites, shale and other impurities from coal.	2678	23rd Sept. 1867	James Hargreaves.
Manufacture and packing of fire-lighters and artificial fuel.	2820	7th Oct. 1867	Henry Trotter.
Application of cannel coal "slack" to the manufacture of gas and coke.	3032	28th Oct. 1867	John Young.
Fire lighters and fire revivers - - -	3194	12th Nov. 1867	John Clowes Bayley. Daniel Campbell.
Manufacture of artificial fuel - - -	3198	12th Nov. 1867	William Henry Crispin.
Compressed or artificial fuel - - - (*Partly communicated by Louis Tresgot.*)	3208	13th Nov. 1867	Auguste François Gaidan.
Manufacture and composition of fire lighting material.	3233	15th Nov. 1867	Richard Green Harcourt.
Improvements in the manufacture of fire lighters, applicable also for temporary fires or heaters, and in the means or apparatus employed therein.	3244	15th Nov. 1867	James Templeman.
Merchants' ships and other vessels and appliances connected therewith. (*preparing fuel.*)	3331	25th Nov. 1867	George Bell Galloway.
Construction of chambers for drying artificial fuel and other substances.	3420	2nd Dec. 1867	David Barker.
Improvements in utilizing mineral and other oils for generating steam, and in the means or apparatus for effecting the same.	3434	3rd Dec. 1867	John Graham Hope.
Manufacture of artificial fuel - - - (*Communicated by Antoine Ferdinand Phillippe Auguste Gaston Decamps, Theodore de Joly and François Felix Chollat.*)	3544	13th Dec. 1867	John Henry Johnson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FUEL, &c.—*continued.*			
Manufacture of artificial fuel	3664	24th Dec. 1867	George Edward Allshorn.
Mode of and apparatus for combining the vapours of liquid hydrocarbons with oxygen and hydrogen, and burning the mixture as fuel. (*Communicated by David Oliver Macomber.*)	3706	31st Dec. 1867	Marc Antoine François Mennons.
See also "CHARCOAL."			
FULLING AND FELTING; FELTED FABRICS; FLOCK, WADDING.			
Machinery for felting hat bodies (*Communicated by Job William Blackham.*)	97	14th Jan. 1867	George Haseltine.
Preparing wool and other fibrous materials to be spun. (*or fulled or felted.*)	555	28th Feb. 1867	Samuel Shore.
An improved casing for protecting bottles or other similar articles, also an improved arrangement of machinery or apparatus for manufacturing such casing (*from felted materials.*)	797	19th March 1867	William McAdam. Sigismund Schuman.
"Milling" machines	1004	3rd April 1867	Joseph Henry Barker.
Improvements in the treatment of fibrous materials and in apparatus to be used in such treatment. (*milling.*)	1207	26th April 1867	John Watson Burton.
Certain improvements in the manufacture of felt carpeting.	1588	29th May 1867	Thomas Mitchell.
Construction of milling machines	1600	29th May 1867	Thomas Greenwood.
Manufacture of felted fabrics (*for carpets.*) (*Communicated by Thomas Crossley.*)	1609	30th May 1867	William Edward Newton.
Application of plastic and fibrous materials to the manufacture of moulded or formed articles. (*saturated felt.*)	1700	10th June 1867	John Macintosh.
Felting machines (*Communicated by James Seeley Taylor.*)	2255	3rd Aug. 1867	William Wilson.
Manufacture of garments for male and female attire. (*by felting.*) (*Communicated by Leander Wolcott Boynton.*)	2529	6th Sept. 1867	John Garrett Tongue.
Fulling machines	2775	2nd Oct. 1867	George Ramsden. Leeming Webster. Joseph Walker.
Construction of fulling-stocks or fulling-machines	2903	16th Oct. 1867	Ernest Gessner.
Improvements in the manufacture of felts and in machinery connected therewith.	2946	19th Oct. 1867	James Anderson.
Improvements in the treatment of fibrous materials and in apparatus used therein. (*giving a face to felted fabrics.*)	3510	10th Dec. 1867	John Watson Burton.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FULLING, &c.—*continued.*			
Improvements in washing machines known as "Dollys," which improvements render such machines also applicable for crushing and fulling fabrics - - - - -	3558	14th Dec. 1867	William Bates. Frederick Bates.
An improved machine for cutting the hair or fur from skins, for hat-making and for the manufacture of felt.	3703	30th Dec. 1867	Joseph Aschermann.
Improvements in the manufacture of hats and other felted articles of wearing-apparel, and in machines employed for these purposes. (*Partly communicated by Rudolf Eickemeyer.*)	3716	31st Dec. 1867	William Wilson.
Certain improvements in carding-engines to be employed in the process of manufacturing felt carpeting - - - - -	3722	31st Dec. 1867	William Mitchell. Thomas Mitchell.
Mechanism or apparatus to be employed in the manufacture of felt hats.	3723	31st Dec. 1867	James George Crompton.
FURNACES AND FIRE-BOXES; SUPPLYING FURNACES WITH FUEL.			
Machinery or apparatus for the prevention of smoke from furnaces used for steam-boilers and other similar purposes.	19	3rd Jan. 1867	Joseph Knowles Broadbent.
Improvements in furnaces and in the manufacture of fire bars for the same.	75	11th Jan. 1867	Isaiah Kendrick.
Improvements in bakers' and other ovens, and also in scrap and other furnaces.	80	11th Jan. 1867	John Tomlinson.
Vertical furnaces for melting and refining metals -	111	16th Jan. 1867	John Clayton.
Apparatus for consuming smoke, promoting combustion, and feeding furnaces with fuel.	158	22nd Jan. 1867	William Arena Martin.
Improvements in blast furnaces and in the method of working the same. (*Communicated by Albert Philippe Adrien Accarain.*)	161	22nd Jan. 1867	William Clark.
Puddling and other furnaces for melting, boiling or heating iron - - - -	210	26th Jan. 1867	John Allcock Jones. Richard Howson.
Lime kilns - - - - -	259	30th Jan. 1867	William Lee.
Improvements in furnaces and in the application thereof to boilers or steam-generators - -	268	31st Jan. 1867	John Lockwood. Henry Shaw.
Fire-grates and furnaces - - -	270	31st Jan. 1867	Archibald Craig.
An improved construction of steam-generator - (*feeding the fuel.*) (*Communicated by Eli Thayer, Sabin Peters Pond and Daniel Bullard Pond.*)	292	2nd Feb. 1867	Alfred Vincent Newton.
Improvements in furnaces or fire-places for the prevention of smoke.	297	2nd Feb. 1867	John Stubbs.
Boilers or apparatus applicable to the generation of steam and to other purposes. (*for puddling furnaces.*)	303	2nd Feb. 1867	Benjamin Harlow.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FURNACES, &c.—*continued.*			
Improvements in steam-boilers, salt-pan and other furnaces or fire-places, for the better combustion of fuel.	354	7th Feb. 1867	Herman Eugene Falk.
An improved method of consuming smoke in furnaces.	454	20th Feb. 1867	William Harrison.
Steam-boilers - - - - -	516	25th Feb. 1867	John Alison.
Furnaces for steam-boilers, boiling pans and other similar purposes - - - -	517	26th Feb. 1867	John Addy Hopkinson. Joseph Hopkinson the younger.
Steam-boiler and other furnaces - -	578	1st March 1867	Benjamin Sheard.
Improvements in means or apparatus for generating, superheating and condensing steam, and heating or boiling water or other liquids, parts of which are applicable to other purposes -	601	4th March 1867	James Marchent. John Parker.
Improvements in the utilization of mineral and other oils for the production of heat, and in the apparatus employed therefor.	616	5th March 1867	James Edward Duyck.
Steam-boiler furnaces - - - -	634	7th March 1867	William Heginbottom.
Improvements in the manner of reducing and refining metallic ores, more particularly ores of iron, and in converting iron into steel, and in apparatus to be used in connection therewith.	652	7th March 1867	Silas Covell Salisbury.
Improvements in supplying heated air to furnaces and fires, and in apparatus connected therewith, which apparatus is also applicable to burning smoke - - - -	741	14th March 1867	William Hamer. Joseph Davies.
Boilers and apparatus for generating steam and evaporating fluids. (*corrugating roofs of fire boxes.*)	757	16th March 1867	Thomas Dunn.
Certain improvements in apparatus applicable for the prevention of smoke.	762	16th March 1867	John Grundy.
Steam-engines and boilers - - -	771	16th March 1867	Edward Ellis Allen.
Heated air engines - - - -	776	18th March 1867	Francis Herbert Wenham.
Improvements in steam-boilers and in apparatus for heating the same, and also for obtaining heat for other purposes.	809	20th March 1867	John Russell Swann.
Furnaces for evaporating brine and for other heating purposes - - - -	830	22nd March 1867	George Cross. Richard Evans.
Improvements in machinery or apparatus for rolling spikes, nails, bolts or other similar articles, from rods, sheets or bars of iron or other metal or malleable substances, and in preparing, shaping, slitting and manufacturing same, and for the construction of furnaces for heating iron or for other similar purposes.	840	22nd March 1867	Samuel Sedgwick.
Certain improvements in furnaces or fire-places -	867	26th March 1867	Thomas Wrigley.
Hot air stoves for blast furnaces - -	893	27th March 1867	Richard Howson.
Certain improvements in fire bars to be employed in furnaces.	906	28th March 1867	John Grundy.
Improvements in the manufacture of iron and steel, and in furnaces and apparatus to be used in the said manufacture.	909	28th March 1867	Thomas Roper.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FURNACES, &c.—*continued.*			
Improvements in the smelting and treatment of iron and other ores, in the fuel and other materials made use of in such treatment, and in apparatus for supplying the same to blast, puddling, and any other furnaces and fires in or by which great heat is required to be generated, parts of which improvements are applicable also to other purposes - - - (*and furnaces for steam-boilers.*)	922	29th March 1867	Enoch Harrison Aydon. Edward Field.
Blast furnaces or cupolas - - - -	944	30th March 1867	Thomas Prideaux.
Improvements in oxidizing minerals, ores and metals, in reducing oxides of metals, in separating certain metals from each other, in kilns, furnaces or other apparatus for these purposes, and in the treatment of the products obtained therefrom.	1042	6th April 1867	William Henderson.
Improvements in fire-bars, and in the manufacture of the iron to be used in the construction thereof, the iron so manufactured being applicable also to other purposes.	1070	10th April 1867	William Colborne Cambridge.
Furnaces of steam and other boilers - -	1076	11th April 1867	Samuel Barlow. Thomas Edmeston.
Apparatus for admitting and regulating the supply of air to furnaces.	1142	18th April 1867	William Begg.
An improved method of consuming smoke in furnaces.	1153	20th April 1867	William Harrison.
Apparatus for burning petroleum and other combustible fluids.	1180	23rd April 1867	Samuel Joseph Mackie.
Steam-boiler furnaces - - - -	1227	27th April 1867	John Swinburne.
A self-acting damper in connection with steam-boilers - - - - - -	1325	6th May 1867	William Schofield. Edmund Smith.
An improved system of tenders for locomotives - (*construction of fire box.*)	1347	7th May 1867	George Krauss.
Improvements in puddling furnaces, also applicable to other furnaces of similar construction.	1409	13th May 1867	John Gay Newton Alleyne.
Improvements in producing and increasing combustion in blast and other furnaces, also for generating steam and for other similar or analogous purposes.	1454	16th May 1867	John Martin Stanley.
Improvements in marine and land boilers and their furnaces, and also other furnaces used for the manufacture of iron and other purposes.	1467	17th May 1867	Simon Regan.
Steam-boiler and other furnaces - - -	1494	20th May 1867	Humphrey Chamberlain.
Arrangement and construction of furnaces for steam-boilers and various other useful purposes. (*Communicated by Emmanuel Minary.*)	1495	20th May 1867	John Garrett Tongue.
Improvements in furnaces for heating the air stoves of blast furnaces and for other purposes, and in utilizing the products of combustion from such stoves.	1517	22nd May 1867	Daniel Adamson.
Kilns or furnaces particularly applicable for burning plaster of Paris. (*Communicated by Paul Louis Daviau.*)	1537	23rd May 1867	Clinton Edgcumbe Brooman.
Constructing furnaces for heating salt pans and for other purposes.	1558	25th May 1867	William Dutton.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FURNACES, &c.—*continued.*			
Furnaces for calcining copper ores and other ores and metals.	1559	25th May 1867	William Price Struvé.
Doors and door frames of furnaces - - (*for boilers, &c.*)	1574	28th May 1867	William Coulson.
Improvements in the production of motive-power and in the apparatus connected therewith. (*Communicated by Jacques Belou.*)	1575	28th May 1867	Henri Adrien Bonneville.
Furnace apparatus of steam-boilers - -	1592	29th May 1867	Robert Newton.
A new means for procuring the more perfect combustion in the burning of fuel.	1610	30th May 1867	Tony Petitjean.
Reverberatory furnaces used for puddling, melting and heating iron, and for other purposes -	1615	31st May 1867	Benjamin Shakespeare. William Shakespeare.
Certain improvements in furnaces, and in apparatus to be employed in the construction of steam-boilers.	1650	5th June 1867	David Hanson.
Improvements in machinery or apparatus for separating liquids or moisture from substances, and also for revivifying and cooling animal charcoal and other substances, and for treating sugar. (*roofs of furnaces.*)	1707	10th June 1867	William Orr.
Furnaces for steam-boilers and other uses - -	1735	13th June 1867	John Glover.
Apparatus to be used in connection with steam-boiler and other furnaces, to adapt them for burning creosote and other combustible liquids.	1742	14th June 1867	Sutton Edward Crow.
Improvements in furnaces for consuming smoke -	1749	15th June 1867	Charles Sadler.
Construction of heating and annealing furnaces - (*Communicated by the Union Car Spring Manufacturing Company.*)	1784	18th June 1867	William Sparks Thomson.
Improvements in furnaces for consuming smoke, applicable to steam-boilers, and other furnaces.	1814	21st June 1867	William Bellhouse.
Water tuyeres - - - - -	1817	21st June 1867	Benjamin Ford. Thomas Ford.
Certain improvements in the construction of water tuyeres - - - - -	1823	22nd June 1867	John Onslow. Francis Northall.
Means of consuming smoke in furnaces and other fire-places.	1854	25th June 1867	Gavin Alston.
Means of consuming smoke in furnaces - -	1861	26th June 1867	Richard Pannell Forlong.
Tuyeres for smiths' hearths - - -	1876	27th June 1867	Moses Horrocks Taylor.
Improvements in the manufacture of welded tubes and in apparatus employed for that purpose, which latter are partly applicable to other purposes - - - - - - (*constructing smiths' fires.*)	1937	3rd July 1867	William Galloway. George Plant.
Self-feeding smokeless furnaces - - -	1955	4th July 1867	Thomas Vicars the elder. Thomas Vicars the younger. James Smith.
Construction of apparatus and furnaces for puddling iron.	1980	6th July 1867	Thomas Morgan.
Improvements in furnaces for the production of heat by burning tar, petroleum and other liquid combustibles, and in the mode of conducting the burning of the said combustibles.	1986	6th July 1867	John Clarkson Major.
Casting of hollow and other fire bars - -	2042	12th July 1867	James Nelson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FURNACES, &c.—*continued.*			
Improvements in or applicable to steam-boiler and other furnaces, for the combustion or prevention of smoke and economizing fuel.	2048	12th July 1867	Jonathan Kellett.
Steam-boilers and furnaces - - -	2049	12th July 1867	George Sinclair.
An improved arrangement or construction of furnaces to be used for preventing smoke and effecting economy of fuel.	2050	12th July 1867	Charles Titus Higginbotham.
Certain improvements in "pulley and chain" gearing to be employed for lifting or traction purposes, for moving fire bars in furnaces, or for driving mechanism.	2073	15th July 1867	Thomas Wrigley.
Construction of furnaces employed in the manufacture of glass.	2075	15th July 1867	Francis Dixon Nuttall.
Consuming smoke, economising fuel and generating steam.	2099	17th July 1867	Samuel Cunliffe Lister.
Improvements in the production of compounds of soda from chloride of sodium, and compounds of potassa from chloride of potassium, and in apparatus employed therein.	2121	20th July 1867	James Hargreaves.
Hot-blast stoves - - - - -	2182	27th July 1867	Humphrey Chamberlain.
Improvements in the manufacture of iron, and in the production of "fetling" for improving the quality and yield of iron in the process of reduction - - - - - -	2189	29th July 1867	Thomas Greener. William Ellis.
Blast furnaces - - - - -	2264	5th Aug. 1867	John Heaton.
Steam-boiler and other furnaces - - -	2266	5th Aug. 1867	John Lockwood.
Furnaces for steam-boilers and other purposes -	2268	6th Aug. 1867	John Bolland.
Furnaces - - - - -	2313	12th Aug. 1867	Edward Brown Wilson.
Blowers for furnaces and other purposes - -	2324	13th Aug. 1867	Benjamin Franklin Sturtevant.
Puddling and other furnaces employed for melting, boiling or heating iron - - -	2337	14th Aug. 1867	John Allcock Jones. Richard Howson John Gjers.
Construction of steam-boilers and apparatus connected therewith.	2389	21st Aug. 1867	Joshua Murgatroyd.
Improvements in furnaces and in processes and apparatus in connection therewith, principally applicable to metallurgical operations.	2395	21st Aug. 1867	Charles William Siemens.
Improvements in the manufacture of iron and steel, and in apparatus employed in the said manufacture. (*Communicated by Virgil Warren Blanchard.*)	2420	23rd Aug. 1867	William Robert Lake.
Improvements in or applicable to Juckes' furnace - - - - - -	2425	24th Aug. 1867	Atwood Wigzell. Eustace Wigzell.
Furnaces - - - - -	2472	30th Aug. 1867	Robert Weare.
Improvements in the manufacture of malleable iron, cast iron and steel, and in the construction of furnaces to be employed for such purposes.	2484	2nd Sept. 1867	Charles Gelstharp.
Improvements in machinery for puddling, and in puddling and other furnaces.	2541	7th Sept. 1867	James Whitham.
Furnaces for melting iron and other metals, and for smelting ores. (*Partly communicated by Heinrich Krigar.*)	2553	9th Sept. 1867	Jacob Eichhorn.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FURNACES, &c.—*continued.*			
Steam-boiler and other furnaces - - - (*Communicated by Heinrich Krigar and Wilhelm Grote.*)	2562	10th Sept. 1867	Jacob Eichhorn.
Improvements in the manufacture of iron and in furnaces used in the manufacture of iron.	2571	11th Sept. 1867	William Baker.
Apparatus for heating, evaporating and cooling liquids.	2593	13th Sept. 1867	William Fothergill Batho.
Improvements in the manufacture of iron and steel, and in furnaces therefor.	2596	13th Sept. 1867	Samuel Dalton.
Blast furnaces - - - - - - (*Communicated by Frederick Lürmann.*)	2611	17th Sept. 1867	Carl Holste.
Improvements applicable to steam-boiler and other furnaces.	2638	19th Sept. 1867	Henry Fisher.
Furnaces - - - - - -	2670	21st Sept. 1867	Samuel Cunliffe Lister.
Improvements in apparatus for regulating automatically the supply of gas, air and water, or any one or more of them, to steam-boilers heated by gas or otherwise, and for utilizing the heat of the gases produced or heated by combustion. (*supporting combustion.*)	2674	23rd Sept. 1867	Charles Ritchie.
Improvements relating to furnaces - - -	2679	23rd Sept. 1867	William Beardmore. Walter Brock. Alexander Carnegie Kirk.
Moveable fire-bars - - - - -	2689	24th Sept. 1867	John Lewis. William Huntington. William Anyon, jun^{r}.
A new or improved method and apparatus for converting the gaseous products of combustion into combustible gases. (*Communicated by Nicolas Lebedeff.*)	2694	25th Sept. 1867	Charles Denton Abel.
Improvements in smelting and treating iron and in blast furnaces or cupolas for such purposes.	2745	28th Sept. 1867	Thomas Prideaux.
Improved arrangements for burning oil in furnaces	2752	30th Sept. 1867	James Donald.
Improvements in the manufacture of cast steel and in furnaces to be employed therein. (*Communicated by Francis Ellershausen.*)	2756	1st Oct. 1867	Edwin Powley Alexander.
Improvements in furnaces, fire-places and fire-bars, for the consumption of smoke and gases arising from products, and the non-consumption of fire-bars.	2757	1st Oct. 1867	Thomas Bird.
Improvements in mechanism or arrangements applicable to steam-boilers and their furnaces, the said mechanism or arrangements being especially applicable to those boilers and their furnaces with which gas is the combustible used.	2772	2nd Oct. 1867	Charles Ritchie.
Improvements in heating blast for smelting and other furnaces, and in the apparatus or means connected therewith.	2781	3rd Oct. 1867	Robert Dick.
An improvement in the construction of furnaces, flues and vessels which are subjected to high temperatures - - - - -	2782	3rd Oct. 1867	Henry Davis Pochin. Edward Hunt.
Improved methods of constructing steam-generators for engines, new furnaces connected therewith, and the mode of working them, with machinery in combination with the uses to which they are applicable.	2792	4th Oct. 1867	Henry Pinkus.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FURNACES, &c.—*continued.*			
An improved apparatus for the prevention or consumption of smoke in the furnaces and flues of steam-boilers - - - -	2825	8th Oct. 1867	John Dean. Thomas Turton.
Certain improvements in the method of consuming smoke and in apparatus connected therewith.	2836	9th Oct. 1867	John Barker.
Method of and apparatus for heating - -	2862	11th Oct. 1867	Robert Alfred Wright.
Improvements in smoke-consuming apparatus for steam-boiler and other furnaces, and in machinery for manufacturing parts of the same.	2871	12th Oct. 1867	Jean Baptiste Pierre Alfred Thierry.
Furnaces and fire-grates - - - -	2880	14th Oct. 1867	John Charles Pearce.
Steam-boilers and furnaces - - -	2920	17th Oct. 1867	William Tredgold. James McNeil.
Tuyeres for blast furnaces and other purposes -	2953	21st Oct. 1867	William Barrett. Charles Martin.
Apparatus for compressing air and for working pneumatic railways.	2978	23rd Oct. 1867	Frederic Seiler.
Improved means and apparatus for economizing fuel and consuming smoke in steam-boilers and furnaces - - - -	2987	24th Oct. 1867	John Ellison. Joseph Stirk.
Improvements in the mode of and apparatus for burning the gases arising from the distillation of liquid hydrocarbons, and also in economizing fuel by the said process - - -	3014	26th Oct. 1867	George Dorsett. Edward Dorsett. John Bennington Blythe.
Steam generators - - - - - (*Communicated by S. Lloyd Wiegand.*)	3025	26th Oct. 1867	Alexander Melville Clark.
Furnaces for steam-boilers and other uses - -	3035	28th Oct. 1867	John Glover.
Furnaces - - - - -	3042	29th Oct. 1867	Edward Brown Wilson.
Fuel feeding apparatus for steam-boilers - -	3131	6th Nov. 1867	Robert Newton.
Steam-boiler and other furnaces - - -	3133	6th Nov. 1867	Edwin Thornton. Robert Thornton.
Apparatus for smoke consuming in steam-boiler and other furnaces - - - -	3139	7th Nov. 1867	Thomas Rothwell Bardsley. William Blackshaw.
Furnaces - - - - -	3168	9th Nov. 1867	Edward Brown Wilson.
Tuyeres for blast furnaces - - - -	3180	11th Nov. 1867	Charles Blakemore Hodgetts.
Furnaces or heating apparatus - - - (*Communicated by Eugene Alexandre Frederic Goguel.*)	3200	12th Nov. 1867	Clinton Edgcumbe Brooman.
Refining copper - - - - (*Communicated by Frederic Le Clerc.*)	3243	15th Nov. 1867	Alexander Melville Clark.
An improved gas furnace - - - -	3245	15th Nov. 1867	Richard Howson.
A new or improved process of and apparatus or furnaces for the manufacture of metal direct from the ore. (*Communicated by Pierre Emile Martin.*)	3264	18th Nov. 1867	Clinton Edgcumbe Brooman.
Improvements in coating metals and metallic articles for the purpose of protecting or preserving the same from oxidation and decay.	3288	20th Nov. 1867	Baroness Camille de Lavenant.
Improvements in smoke-consuming apparatus, parts of which improvements are applicable to other purposes.	3289	20th Nov. 1867	Joseph Staincliffe.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FURNACES, &c.—*continued.*			
Means of and apparatus for consuming smoke and economizing fuel in furnaces of steam-boilers and other furnaces.	3314	23rd Nov. 1867	George Douglas Hughes.
Steam generators - - - - (*Communicated by Pierre Joseph Guyot.*)	3321	23rd Nov. 1867	Clinton Edgcumbe Brooman.
Merchants' ships and other vessels and appliances connected therewith.	3331	25th Nov. 1867	George Bell Galloway.
Arrangements or apparatus for watering and cleansing streets and roads, and for speedily removing snow. (*furnace for melting snow.*)	3337	26th Nov. 1867	William Sim.
An improved arrangement or construction of furnaces to be used for preventing smoke and effecting economy of fuel.	3348	26th Nov. 1867	Charles Titus Higginbotham.
Improvements in utilizing mineral and other oils for generating steam, and in the means or apparatus for effecting the same.	3434	3rd Dec. 1867	John Graham Hope.
Improvements in steam-boiler furnaces and in apparatus connected therewith.	3459	5th Dec. 1867	Daniel Smith.
Improvements in annealing furnaces and in apparatus to be employed therein, parts of which improvements may be applied to certain other descriptions of furnaces and fires - -	3467	5th Dec. 1867	Matthew Tildesley. James Bird.
Improvements in furnaces and in effecting the combustion of fuel therein.	3468	5th Dec. 1867	Thomas Joseph Leigh.
An improved material or composition to be employed for covering or coating the interior surfaces of moulds, crucibles or ducts, previous to their receiving the molten metal in the process of casting and for other purposes. (*or tapping cupolas.*)	3473	6th Dec. 1867	James Durrans.
Improvements in the treatment and reduction of titaniferous iron ores and in the manufacture of iron, and in the construction of furnaces to be employed therein - - - -	3502	9th Dec. 1867	Charles Martin. William Barrett. Thomas Stammers Webb.
Water tuyeres for blast furnaces, smiths' fires and for other like purposes.	3529	12th Dec. 1867	Rowland William Brownhill.
Gas retort ovens and furnaces - - - (*Communicated by John Olof Wallin.*)	3554	14th Dec. 1867	Henry Atkinson.
Improvements in feeding furnaces for prevention of smoke and economizing fuel.	3565	14th Dec. 1867	Ollive Hollingworth.
Means of and apparatus for obtaining and applying hydrogen gas to the furnaces of steam-engines, boilers, and kilns for the manufacture of bricks and lime.	3580	16th Dec. 1867	James Standfield.
Furnaces for steam-boilers and other purposes -	3592	18th Dec. 1867	Henry Green.
Furnace grates and casings - - - (*Communicated by Robert Loudon Walker.*)	3599	18th Dec. 1867	James Hall.
Improvements in glass bottle house pot carriages and implements used in setting glass bottle house pots, which invention admits of improvements in the construction of furnaces for melting bottle or other glass in open pots.	3613	19th Dec. 1867	Edgar Breffit.
Improvements relating to blast and cupola furnaces - - - - - -	3663	24th Dec. 1867	James Addie. Ferdinand Kohn.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FURNACES, &c.—*continued.*			
Improvements in the manufacture of iron and steel, and in furnaces and apparatus used in the said manufacture - - - - - -	3667	24th Dec. 1867	George James Hinde. Thomas Callender Hinde.
Improvements in warming, ventilating and heating apartments or buildings, and in the arrangement of apparatus connected therewith.	3682	27th Dec. 1867	John William Lewis.
Furnaces - - - - - - -	3695	28th Dec. 1867	John Jowett.
Improvements in the process of and apparatus for producing heat by the combustion of fuel, for metallurgical and other operations where heat is required, and in the means for utilizing the waste heat from blast furnaces.	3698	30th Dec. 1867	Richard Fothergill.
Apparatus for consuming or preventing the formation of smoke in steam-boiler and other furnaces	3700	30th Dec. 1867	Walter Kendrick. Job Wooldridge.
Improvements in furnaces for smelting glass or the materials employed therein, and for consuming smoke.	3702	30th Dec. 1867	James Davison.
FURNITURE;—BEDSTEADS, TABLES, CHAIRS, CRADLES AND NURSING-APPARATUS; CASTORS, BEDSTEAD-BOTTOMS, DESKS.			
An improved portable folding chair - -	6	1st Jan. 1867	Henry Alfred James.
An improved form or bench with back to fold so as to occupy only a few inches in thickness.	72	11th Jan. 1867	Samuel Page Widnall.
Construction of seats or chairs suitable for preserving life in case of shipwreck, and also for being used as bathing chairs.	78	11th Jan. 1867	Michael Hodge Simpson.
Improved means of conveying sound from preachers or lecturers to the congregation or audience. (*acoustic pulpit.*)	160	22nd Jan. 1867	Frederick Charles Rein.
Stands, holders or tables specially adapted for portfolios, prints, large books and such like articles.	194	25th Jan. 1867	Frederick Holt M^{c}Lauchlan.
Manufacture of envelope cases, blotting books and other articles, commonly called "writing" or library sets, and other similar articles. (*desks.*)	305	4th Feb. 1867	George William Betjemann.
An improved combined bench and desk - -	370	9th Feb. 1867	Thomas Reginald Jones.
An improved construction of dining table -	434	16th Feb. 1867	Henry Cooper.
Chairs for affording proper support and rest to the human body (particularly the lower part of the spine) when in a sitting posture.	501	23rd Feb. 1867	Charles Godfrey Gumpel.
Certain improvements in the manufacture of metallic bedsteads, part of which said improvements are applicable to cornice poles, gas fittings, balustrades and other like articles - -	639	7th M arch 1867	Robert Luke. William Parkes.
Connecting door and other knobs to their spindles (*drawer knobs.*)	691	11th March 1867	Joseph Beverley Fenby.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FURNITURE, &c.—*continued.*			
Improvements in the manufacture of hat and coat hooks, and in attaching knobs and ornaments to various articles.	710	12th March 1867	James Alfred Fussell.
A travelling trunk, bath and cradle combined -	773	18th March 1867	William Henry Bailey.
An improved machine for cutting scale-board, and for the manufacture of the scale-board or material cut by said machine into an improved fabric for structures generally. (*for bedsteads, divans, chairs, &c.*) (*Communicated by John Kinney Mayo.*)	1051	8th April 1867	William Clark.
Seats and sofas - - - - - -	1228	27th April 1867	John Taylor.
An improved apparatus for preventing the access of insects to the interior of dwellings, and to pictures, mirrors and articles of furniture. (*net cover.*) (*Communicated by John George De Coursey.*)	1238	29th April 1867	John Henry Johnson.
Spring mattresses or beds and bedsteads - -	1293	3rd May 1867	Ernest Krieghoff.
Bedsteads - - - - - -	1362	8th May 1867	Henry Richard Cottam.
Ornamental balusters and balustrades, and other ornamental rails. (*for umbrella stands.*)	1364	8th May 1867	Henry Richard Cottam.
An improved caster for tables, chairs and other articles of furniture. (*Communicated by Edward Ward Wilder and Simon Gardner Cheever.*)	1406	11th May 1867	William Robert Lake.
Billiard tables - - - - - - (*or dining tables.*) (*Communicated by Hugh W. Collender.*)	1440	15th May 1867	Alfred Vincent Newton.
Ornamenting certain kinds of bowls of castors for furniture - - - - - -	1519	22nd May 1867	John Cartland. Henry Bold.
An improved table with rotary top - - -	1533	23rd May 1867	Olmade (Rodolphe), born Feuillet.
Boxes, drawers and other like receptacles - -	1715	11th June 1867	George Philip Hill.
An improved seat for babies or young children -	1792	19th June 1867	Ann Littlejohns Panter.
Construction of castors - - - -	1796	19th June 1867	James Edward Whiting.
Easy or invalid chairs - - - - -	1805	20th June 1867	John Ward. Frederic Dressler.
Construction of camp or folding bedsteads - (*Communicated by Robert Clegg.*)	1811	21st June 1867	Benjamin Browne.
Construction of folding bedsteads and couches -	1812	21st June 1867	James Gardner.
Construction and production of bedsteads, couches or sofas and other similar articles.	1884	28th June 1867	William Marshall.
Improvements in fire-escapes, the same being suitable for ascending and descending mines or other deep places, and at other times convertible into a piece of furniture, such as a couch, ottoman, chair, table or other similar article.	2069	13th July 1867	John Scott.
Fastenings for window-sashes, casements, shutters, doors, port-hole lights and other similar objects. (*for tables.*)	2116	19th July 1867	John Rogers.
Spring bed bottoms - - - - -	2145	23rd July 1867	Sterling Bonsall.
An improved reclining chair - - -	2171	26th July 1867	Robert Reid. Edward Horne Craigie.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FURNITURE, &c.—*continued.*			
An improved combined bed, couch and chair for the use of invalids.	2338	14th Aug. 1867	Christopher Fabian Bower.
A new manufacture of woven fabrics imitating fabrics woven with horse hair - - -	2349	15th Aug. 1867	Robert Cleland. Robert Cunningham.
Spring mattresses, sofas, couches and chairs -	2619	17th Sept. 1867	Daniel Gardner.
An improved combined billiard and dining or general table.	2762	1st Oct. 1867	George Francis Green.
A new or improved castor for furniture or other purposes.	2765	1st Oct. 1867	Raymond Fletcher.
Construction of bedsteads and mattresses - -	2766	1st Oct. 1867	Thomas Edward Clark.
Improvements in mattresses, sofas, couches, ottomans, easy chairs, railway carriage seats and other such like or similar articles - - -	2834	8th Oct. 1867	Robert Reid. Edward Horne Craigie.
Construction of chairs and such like seats intended to be used in concert rooms, theatres and other public buildings, and in houses of business.	2902	16th Oct. 1867	Charles Tinet.
Chairs for the use of dentists, barbers, photographers or other persons, such invention also being applicable to other useful purposes.	2915	17th Oct. 1867	Otis Converse White.
A novel kind of nail or tack for upholstery and cabinet work. (*Communicated by Louis Gabriel Ragueneau.*)	2988	24th Oct. 1867	William Edward Gedge.
An improved cap for upholstery or furniture springs (*Communicated by Ambrose Tower.*)	3068	31st Oct. 1867	William Robert Lake.
Mattresses, cushions, sofas, seats and other similar articles. (*Communicated by Friedrich August Kandler.*)	3104	4th Nov. 1867	Nathan Birkenruth.
Improvements in various articles of furniture, for the purpose of adapting them to additional useful purposes - - - - - (*Partly communicated by Frederick Wasielewski.*)	3182	11th Nov. 1867	George Ellis. Mark Jacobson.
An improved caster for tables, chairs and other articles of furniture. (*Communicated by Edward Ward Wilder and Simon Gardner Cheever.*)	3188	11th Nov. 1867	William Robert Lake.
A new game to be played with balls and cues or other media for propelling the said balls, and also for the peculiar construction of the table on which the same is played, together with the several mechanical appliances and figures.	3313	22nd Nov. 1867	John Harcourt Brown.
Machinery for ruling ornamental patterns or devices - - - - - (*compound table.*)	3322	23rd Nov. 1867	Samuel Amphlet. Joseph Beverley Fenby.
Improvements in bedsteads, which improvements are also applicable to other purposes.	3383	28th Nov. 1867	Joseph Robinson Towers.
Construction and manufacture of mechanism for expanding tables and other expanding furniture.	3410	30th Nov. 1867	Joseph Fitter.
An improvement in the construction of easy chairs, settees, sofas, seats for railway and other carriages, and invalid hospital couches or carriages - - - - - -	3412	2nd Dec. 1867	Thomas Finer Widenham. John Reynolds.
Tables - - - - - -	3431	3rd Dec. 1867	Samuel Vaile.
Step chairs, ladders and steps - - -	3460	5th Dec. 1867	Samuel Leake Worth.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
FURNITURE, &c.—*continued.*			
Improvements in the construction of operating chairs more especially designed for dentists, parts of such improvements being applicable for other purposes.	3484	7th Dec. 1867	James Beall Morrison.
Improvements applicable to metallic bedsteads and matrasses.	3594	18th Dec. 1867	Robert Doyne Dwyer.
Metallic bedsteads, cots and couches - -	3610	19th Dec. 1867	James Atkins.
Construction of camp or folding bedsteads - - (*Communicated by Robert Clegg.*)	3631	21st Dec. 1867	Benjamin Browne.
GAMES AND EXERCISES; BILLIARDS AND BAGATELLE.			
New or improved implements or apparatus for playing games of skill and chance.	180	24th Jan. 1867	Thomas Taylor.
Apparatus employed in athletic exercises - -	339	6th Feb. 1867	William Prangley.
Cricket spikes to be made in steel, iron, brass or any other metal or material.	490	22nd Feb. 1867	Joseph Wareing.
Billiard tables - - - -	576	1st March 1867	Charles Henry Beckingham.
Jumping or skipping hoops - - - - (*Communicated by Charles Lyman Browne.*)	854	23rd March 1867	John Garrett Tongue.
Billiard tables - - - - - (*Communicated by Hugh W. Collender.*)	1440	15th May 1867	Alfred Vincent Newton.
An improved table with rotary top - - (*chess board.*)	1533	23rd May 1867	Olmade (Rodolphe), born Feuillet.
New or improved implements or apparatus for playing games of skill and chance.	1857	26th June 1867	Thomas Taylor.
Stands or holders for croquet balls and implements	1960	4th July 1867	John Bolton.
Apparatus employed in athletic exercises - -	2265	5th Aug. 1867	William Prangley.
An improved combined billiard and dining or general table.	2762	1st Oct. 1867	George Francis Green.
Croquet mallets - - - - -	3024	26th Oct. 1867	James Asser.
Improvements in marking boards used in the game of billiards, parts of which are applicable to registering the number of persons passing through pay gates or conveyed by vehicles.	3029	28th Oct. 1867	George Smith.
Tables or apparatus to be used in playing games with balls.	3146	7th Nov. 1867	Benjamin Thomas Newnham.
New or improved implements or apparatus for playing games of skill and chance.	3213	13th Nov. 1867	Thomas Taylor.
Improvements in the construction of the parts, apparatus or materials of certain games, by which improvements such games are adapted to be played in ordinary rooms.	3251	16th Nov. 1867	Richard Garbett.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
GAMES, &C.—*continued.*			
A new game to be played with balls and cues or other media for propelling the said balls, and also for the peculiar construction of the table on which the same is played, together with the several mechanical appliances and figures.	3313	22nd Nov. 1867	John Harcourt Brown.
An improved cribbage board - - -	3326	25th Nov. 1867	Thomas Barton.
Tables - - - - - - (*for conversion into billiard tables.*)	3431	3rd Dec. 1867	Samuel Vaile.
GAS, GASOMETERS, HOLDERS AND RETORTS; OXYGEN.			
Improvements in the means of and apparatus for lighting railway carriages, parts of which improvements are also applicable for other purposes. (*gas holder.*)	58	9th Jan. 1867	William Thomas Sugg.
Improvements in treating benzole and other hydrocarbon liquids, and in making such liquids non-explosive, and of generating an illuminating gas therefrom. (*Communicated by John Johnson.*)	64	10th Jan. 1867	Lewis Hand.
Manufacture of illuminating gas - -	73	11th Jan. 1867	Frederick John Evans.
Improvements in the production of illuminating gas, and in the manufacture and application or use of new or improved materials or fuels for the same, and in the means or apparatus employed therefor.	164	22nd Jan. 1867	John Patison.
An improved compound or combination of materials to be used for the production of illuminating gas.	231	29th Jan. 1867	James Greenshields.
Improvements in effecting the distillation of coal, shale, wood, peat and other bituminous or carbonaceous substances - - - -	284	1st Feb. 1867	Jacob Buhrer. Astley Paston Price.
Treatment of liquid hydro-carbons for the purpose of obtaining a permanent gas.	563	28th Feb. 1867	Alexander Angus Croll.
Improvements in the means and apparatus for producing oxygen, and in the application of the same for metallurgical and other purposes. (*Communicated by Henri Adolphe Archereau.*)	568	28th Feb. 1867	William Clark.
Improved apparatus for the production or improvement of inflammable gases.	608	5th March 1867	Henri Ulliel.
Manufacture of gas - - - -	624	6th March 1867	John Thompson.
Improvements in the manner of reducing and refining metallic ores, more particularly ores of iron, and in converting iron into steel, and in apparatus to be used in connection therewith. (*generating gases.*)	652	7th March 1867	Silas Covell Salisbury.
An improved artificial material for producing gas to be used for illuminating purposes.	721	13th March 1867	John Hamilton.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
Gas, &c.—*continued.*			
Arrangement of apparatus for "scurfing" or removing carbon from gas retorts.	790	19th March 1867	James Hislop.
An improved compound or combination of materials to be used for the production of illuminating gas.	819	21st March 1867	James Greenshields.
Improved means of producing oxygen - - (*Communicated by Cyprien Marie Tessié du Motay and Charles Raphael Maréchal.*)	1040	6th April 1867	Clinton Edgcumbe Brooman.
A combined gas-lighting and cooking apparatus - (*producing gas.*)	1191	24th April 1867	Thomas South.
Improvements in the manufacture of gas and in the apparatus for holding the same.	1272	2nd May 1867	Peter Salmon.
A new or improved method and apparatus for converting the gaseous products of combustion into combustible gases. (*Communicated by Nicolas Lebedeff.*)	1356	8th May 1867	Charles Denton Abel.
Manufacture of illuminating gas - - -	1382	9th May 1867	George McKenzie.
A method of manufacturing illuminating gases - (*Communicated by William Elmer.*)	1448	16th May 1867	George Tomlinson Bousfield.
An apparatus for transferring heat from one current of gas to another. (*Communicated by Monsieur Charles Fleurot.*)	1478	18th May 1867	Hector Auguste Dufrene.
Improvements in burning all hydro-carbon oils, such as creosote, petroleum, paraffin oil, shale oil, gas tar, and other similar products capable of being used as fuel. (*converting into gas.*)	1487	20th May 1867	Thomas Metcalf.
Arrangement and construction of furnaces for steam-boilers and various other useful purposes. (*for gas retorts.*) (*Communicated by Emmanuel Minary.*)	1495	20th May 1867	John Garrett Tongue.
Improvements in the construction of a steam vessel suitable for ferrying laden trains across the ocean, complete, together with its landing-places, breakwaters, and modes of protection from marine insects and fouling, which improvements are also generally applicable to other vessels, and to the protection of iron and wood exposed to the action of sea water. (*generating gas.*)	1503	21st May 1867	Edward Henry Cradock Monckton.
Seal or dip pipes in connection with gas and other retorts - - - - -	1578	28th May 1867	Henry Cockey. Francis Christopher Cockey.
Apparatus for registering and recording the quality of gas. (*see* "THERMOMETERS.") (*Communicated by Christopher Friedleben.*)	1684	7th June 1867	James Warburton.
Manufacture of illuminating gas - - -	1748	15th June 1867	George McKenzie.
Manufacture of illuminating gas - - -	1819	21st June 1867	George Dickie.
A new metallic zinc paint - - - (*and porous alloys for purifying gas.*)	1845	25th June 1867	James Webster.
Manufacture of illuminating gas from gas tar oil or from gas tar.	1846	25th June 1867	Thomas Crow.
Means or apparatus for the production of gas for illuminating and other uses from hydrocarbons, which apparatus is also adapted to be used for culinary and other heating purposes - -	1849	25th June 1867	Adam Aitchison. Thomas South.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
Gas, &c.—*continued.*			
Treatment of apparatus employed in the manufacture and materials used in the purification of gas - - - - - -	1931	3rd July 1867	John Somerville. Robert Elsdon.
Improvements in the manufacture of illuminating gas, and in apparatus employed in the said manufacture. (*Communicated by George A. McIlhenny.*)	1967	4th July 1867	William Robert Lake.
Improvements in the manufacture of gas and in apparatus connected therewith - - -	2004	9th July 1867	John James Buckley. Charles Hook.
Apparatus for producing or increasing the light or heat from carbonized atmospheric air, gas or gaseous mixtures, by the use of hydrocarbons, oils, spirits or other inflammable liquids or any mixture thereof. (*super carburetters.*)	2045	12th July 1867	Frederick Wilkins.
Improvements in the manufacture of gases for the production of light, heat and motive-power, and in apparatus for that purpose.	2180	27th July 1867	Paul Alexander Rohart.
Apparatus to be used in making gas from petroleum and other liquids - - -	2194	29th July 1867	David Hodge. Robert Christopher Witty.
Apparatus used in the manufacture of gas - -	2320	13th Aug. 1867	Henry Thomas Everist.
Treating products obtained when operating on wood and other vegetable substances to obtain fibre therefrom.	2370	17th Aug. 1867	Frederick Burnett Houghton.
A new process for producing hydrogen - - (*Communicated by Cyprien Marie Tessié du Motay and Charles Raphael Marechal, fils.*)	2548	9th Sept. 1867	Clinton Edgcumbe Brooman.
Improvements in the production of carburetted gas and in the apparatus and burner applicable thereto - - - - -	2663	21st Sept. 1867	Adam Aitchison. Henry John Grantham.
A new or improved method and apparatus for converting the gaseous products of combustion into combustible gases. (*Communicated by Nicolas Lebedeff.*)	2694	25th Sept. 1867	Charles Denton Abel.
Improved methods of constructing steam generators for engines, new furnaces connected therewith, and the mode of working them, with machinery in combination with the uses to which they are applicable. (*generating gases.*)	2792	4th Oct. 1867	Henry Pinkus.
Improvements in means or apparatus to be used in impregnating air and aëriform fluids or gases with hydrocarbons, and in burners used in burning the inflammable air obtained, which burners are also applicable when burning other gaseous fluids.	2811	5th Oct. 1867	Nathaniel Fortescue Taylor.
Improvements in the treatment of hydrocarbons for the production of gas sufficiently permanent to be stored for lighting and heating purposes, and especially in the treatment of the hydrocarbons and other products obtained by distilling or carbonizing coal, wood and other carbonaceous materials, including those obtained in the manufacture of gas and in the distillation of coal tar.	2893	15th Oct. 1867	Adam Aitchison.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
GAS, &c.—*continued.*			
Improvements in treating sewage or other liquid matters so as to purify the more fluid portions thereof, and recover some of the contained matters for re-use in manufacturing processes, and in the preparation of others for use as manures (*obtaining gas.*)	2894	15th Oct. 1867	Thomas Henry Baker. Thomas Woodroffe.
Improvements in the manufacture and storing of illuminating gas and in apparatus employed therein.	2989	24th Oct. 1867	George Olney.
Application of cannel coal "slack" to the manufacture of gas and coke.	3032	28th Oct. 1867	John Young.
Improvements in apparatus for stirring or agitating solid substances, and for exposing them to the action of the air, gases and vapours.	3124	5th Nov. 1867	Arthur McDougall.
Furnaces or heating apparatus - - - (*forming combustible gases.*) (*Communicated by Eugene Alexandre Frederic Goguel.*)	3200	12th Nov. 1867	Clinton Edgcumbe Brooman.
Improvements in the manufacture of gas, and in the treatment and application of such and other gases for cooking, warming, lighting, generating of steam and other purposes, combined with their use as a motive-power previous to being burned or consumed, and improvements in the apparatus for these purposes.	3318	23rd Nov. 1867	Peter Salmon.
Gas retort ovens and furnaces - - - (*Communicated by John Olof Wallin.*)	3554	14th Dec. 1867	Henry Atkinson.
Improvements in the extraction of ammonia from fermented and other liquids, and in the regeneration of the agents used in such extraction. (*from waste-waters of gas-works.*) (*Communicated by Armand Coste and Louis Taupin De Rosnay.*)	3566	14th Dec. 1867	Alexander Melville Clark.
Means of and apparatus for obtaining and applying hydrogen gas to the furnaces of steam-engines, boilers, and kilns for the manufacture of bricks and lime.	3580	16th Dec. 1867	James Standfield.
Furnaces for steam-boilers and other purposes - (*for gas-making.*)	3592	18th Dec. 1867	Henry Green.
For Carbonic Acid Gas, *see* "AËRATING." For Nitrous Acid Gas, *see* "ACIDS."			
GAS AND OTHER BURNERS AND REGULATORS; GAS FITTINGS; LIGHTING GAS; PREVENTING ESCAPE OF GAS.			
Improved apparatus for regulating, controlling and for varying the speed of shafts and machinery. (*gas exhausters.*)	51	8th Jan. 1867	Robert Robinson.
Improvements in apparatus used for boring and tapping gas and water mains, and in fitting service pipes or cocks thereto.	145	19th Jan. 1867	Alfred Upward.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
GAS BURNERS, &c.—*continued.*			
Lamps for burning paraffin oil and other volatile oils.	171	23rd Jan. 1867	Arthur Chamberlain.
Improvements in the means and mode of admitting and regulating atmospheric air or vapour to gas-burners.	227	28th Jan. 1867	William Henry Stallard.
Gas regulators - - - - - (*Communicated by Joseph Summers Wood, John Jackson Carberry, John Baker, junior, and Oscar Dunreath McClellan.*)	255	30th Jan. 1867	Bristow Hunt.
Gas-burners - - - -	363	8th Feb. 1867	Daniel Nathan Defries.
An improved mode of and apparatus for letting on and shutting off gas, and igniting the same. (*Communicated by Edwin Eaton Bean and William Howard Mumter.*)	463	20th Feb. 1867	George Haseltine.
Gas-pressure governors - - -	495	22nd Feb. 1867	William Edwin Heath.
Certain improvements in lamps - - -	525	26th Feb. 1867	George Young.
Improved means or apparatus for regulating the supply of gas to burners.	577	1st March 1867	Walter Christopher Thurgar.
Improved apparatus for the production or improvement of inflammable gases.	608	5th March 1867	Henri Ulliel.
Improvements in the utilization of mineral and other oils for the production of heat, and in the apparatus employed therefor.	616	5th March 1867	James Edward Duyck.
Certain improvements in the manufacture of metallic bedsteads, part of which said improvements are applicable to cornice poles, gas fittings, balustrades and other like articles -	639	7th March 1867	Robert Luke. William Parkes.
Lamps for burning petroleum or other mineral oils (*and burners.*)	667	8th March 1867	Gabriel Dümler.
Apparatus for raising, forcing, propelling and exhausting fluids and gases.	686	11th March 1867	William Bryer Nation.
An improved apparatus for the promotion of economy in the combustion of gas, petroleum and other oils. (*see* "LAMPS.") (*Communicated by Oscar Louis and Jean Hoedemaker.*)	692	11th March 1867	Edward Thomas Hughes.
Improvements in utilizing the heating properties of petroleum and other liquid hydrocarbons and oils, and in apparatus employed therefor -	930	29th March 1867	Arthur Barff. Joshua Kidd.
A new application of gas-burners - - -	1024	5th April 1867	François Adolphe Mocquard.
Improvements in lamps, part of which improvements consists in the imitation of a candle and candlestick. (*Communicated by Edmond Annand Louis D'Argy.*)	1038	6th April 1867	William Clark.
Improvements in distributing and measuring gas, steam, water and other fluids, and in the apparatus or means employed therein.	1158	20th April 1867	Richard Hastings Frith.
Apparatus for reducing and regulating the quantity and pressure of steam, fluids and gases.	1217	26th April 1867	George Pollard.
Lamps and apparatus for facilitating the burning of petroleum, paraffin oil and other hydro-carbon fluids, for obtaining light and heat - - (*burners.*)	1315	4th May 1867	Peter Brash. William Young.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
GAS BURNERS, &c.—*continued.*			
An improved mode of and apparatus for burning hydro-carbon oils.	1329	6th May 1867	Thomas Crow.
Valves for regulating the flow of liquids, gases and other elastic fluids.	1335	7th May 1867	Eugène Bourdon.
Certain improvements in the means of casting or producing parts of steam, gas and water fittings, as also parts of lamps and other articles.	1355	8th May 1867	Charles Layton.
An improved mode of constructing metal cocks, faucets and other similar articles. (*gas taps.*) (*Communicated by William Westlake.*)	1407	11th May 1867	William Robert Lake.
Obtaining increased light in the combustion of illuminating matters.	1628	1st June 1867	Anton Georg Schaeffer.
Cylindrical or "Argand" gas-burners - -	1837	24th June 1867	Elliott Perry Gleason.
Lamp burners for burning petroleum, spirit and other highly volatile liquids.	1838	24th June 1867	Léon Charles François Clerc.
Lamps for burning petroleum, shale and other mineral oils.	1910	29th June 1867	Charles Petit.
A new or improved plug valve - - - - (*for gas.*)	1992	8th July 1867	Ivie Mackie McGeorge. Alfred Paul.
Apparatus for producing or increasing the light or heat from carbonized atmospheric air, gas or gaseous mixtures, by the use of hydrocarbons, oils, spirits or other inflammable liquids or any mixture thereof.	2045	12th July 1867	Frederick Wilkins.
Heating and cooking apparatus - - (*Communicated by Oscar Fitzallan Morrill.*)	2110	18th July 1867	George Tomlinson Bousfield.
Gas regulators - - - - - -	2173	26th July 1867	Edmund Smith.
An improved method of lighting house and other fires - - - - - - (*using jets of gas.*)	2188	29th July 1867	William Lawrence Lowe Leaver. Aaron Smalley.
Improvements in or applicable to slide valves for admitting the flow or passage of steam, water or other fluids and gases when pressed -	2300	10th Aug. 1867	John Davenport. John Kitson.
Apparatus and means for burning combustible liquids, vapours and gases, to obtain heat and light therefrom - - - - -	2414	22nd Aug. 1867	James Lee Norton. George Hawksley.
Apparatus for regulating the supply of gas to burners.	2435	26th Aug. 1867	Walter Christopher Thurgar.
Means or apparatus employed for lighting gas and other jets or lamps, candles, cigars and other articles.	2531	7th Sept. 1867	James Joseph Hicks.
Apparatus for distributing gas for heating and lighting.	2629	19th Sept. 1867	Richard Watson.
Gas lamps and burners for the same - -	2643	20th Sept. 1867	Louis Lenzberg.
Improvements in the production of carburetted gas and in the apparatus and burner applicable thereto - - - - - -	2668	21st Sept. 1867	Adam Aitchison. Henry John Grantham.
An improvement in gas-burners - - -	2692	24th Sept. 1867	Thomas Henry Williams.
Improved methods of constructing steam generators for engines, new furnaces connected therewith, and the mode of working them, with machinery in combination with the uses to which they are applicable. (*rotating furnace burner.*)	2792	4th Oct. 1867	Henry Pinkus.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
GAS BURNERS, &c.—*continued.*			
Improvements in means or apparatus to be used in impregnating air and aëriform fluids or gases with hydrocarbons, and in burners used in burning the inflammable air obtained, which burners are also applicable when burning other gaseous fluids.	2811	5th Oct. 1867	Nathaniel Fortescue Taylor.
An improvement in the construction of gas-burners	2859	11th Oct. 1867	Julius Brönner.
Cocks or valves for discharging water, oil and other fluids or gases.	3004	25th Oct. 1867	Henry Wilson.
An improved portable distilling apparatus for producing fresh aërated water from sea water, part of which said apparatus is also applicable to the burning of hydrocarbon oils for other purposes.	3072	31st Oct. 1867	Alexander Chaplin.
Improvements in apparatus to be applied to lamps and burners for the more perfect combustion of carburetted gases - - -	3110	5th Nov. 1867	Herbert Allman. Frederic Newton Gisborne.
Warming, ventilating and heating apparatus - -	3155	8th Nov. 1867	Joseph Wontner Smith. Tony Petitjean.
Apparatus for burning mineral oils or other hydrocarbons, to obtain heat therefrom.	3176	9th Nov. 1867	William Lawrie.
Apparatus for burning and distilling petroleum and other oils, to generate steam, and for other purposes. (*Communicated by Adam Robertson and Ananias Smith.*)	3183	11th Nov. 1867	Clinton Edgcumbe Brooman.
An improved gas furnace - - - - - (*arrangement of burners.*)	3245	15th Nov. 1867	Richard Howson.
Lamps for burning petroleum and other volatile oils or essences.	3303	21st Nov. 1867	Ernest Thorold.
Lamp burners - - - - - -	3353	26th Nov. 1867	Milton Alexander Hamilton.
Apparatus for regulating the supply of gas to burners.	3415	2nd Dec. 1867	Edward Price.
Lamps - - - - - - - (*and burners.*) (*Partly communicated by François Maurel.*)	3532	12th Dec. 1867	William George Hanning. George Ballantyne Knott. Léon Charles François Clerc.
An improved gas-burner - - - - - (*Communicated by Willis Churchill.*)	3696	28th Dec. 1867	Charles Churchill.
Mode of and apparatus for combining the vapours of liquid hydrocarbons with oxygen and hydrogen, and burning the mixture as fuel. (*Communicated by David Oliver Macomber.*)	3706	31st Dec. 1867	Marc Antoine François Mennons.

For gas pipes, *see* "PIPES."

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
GAUGES, SAFETY PLUGS, WATER LEVEL INDICATORS.			
Certain improvements in fluid safety guages for steam-boilers and other pressure and vacuum vessels.	511	25th Feb. 1867	John Marshall.
Improvements in self-acting steam and fluid safety gauges, the said improvements being applicable to cocks or taps and valves.	591	2nd March 1867	John Ambrose Coffey.
An improved feed-water regulator for steam-boilers - (*Communicated by John Wesley Doughty and Benjamin Franklin Olmsted.*)	614	5th March 1867	George Haseltine.
Improvements in boilers or steam generators and in valves or plugs connected therewith.	756	16th March 1867	Thomas Cowburn.
Steam and vacuum gauge - - - (*Communicated by Emmett Quinn.*)	871	26th March 1867	George Davies.
Improvements in the manufacture of spoons, forks and other similar articles, and in apparatus or machinery to be employed therein, parts of which said apparatus or machinery are applicable to other manufactures. (*pressure gauge.*)	1055	9th April 1867	Daniel Joseph Fleetwood.
Construction of valves and valve cocks - - (*gauge cocks.*)	1102	13th April 1867	John Shore.
An improved alarm apparatus for indicating and registering the rise of water in the holds of ships or vessels. (*Communicated by Charles Benjamin Norton.*)	1239	29th April 1867	Marc Antoine François Mennons.
Valves for steam and other fluids - - - (*water level indicators for steam-boilers.*)	1384	10th May 1867	William Bracewell. William Pickup. Benjamin Lund.
Improvements in gauges for steam-boilers, and in the construction and application of taps, cocks or valves for or to such gauges.	1401	11th May 1867	John Steven.
An improved mode of constructing metal cocks, faucets and other similar articles. (*water gauges.*) (*Communicated by William Westlake.*)	1407	11th May 1867	William Robert Lake.
Water gauges for steam-boilers - - - (*Communicated by Ambrose George Fell.*)	1463	17th May 1867	William Robert Lake.
An improved combined feed-water regulator and water guage for steam-boilers. (*Communicated by Lewson E. Chase.*)	1824	22nd June 1867	Oliver Rice Chase.
Improvements in apparatus for indicating and registering the pressure of steam in steam generators, and the pressure in hydraulic presses and other vessels or chambers, which improvements are also applicable to indicating and registering pressure and vacuum in steam-engines, the vacuum in condensing apparatus, also to indicating and registering the combined pressure of the steam or other power employed to give motion to an engine, and the speed of such engine or other machinery, also to indicating and registering barometrical variations. (*Communicated by Bernhard August Schäffer and Christian Friedrich Budenberg.*)	2249	3rd Aug. 1867	Arnold Budenberg.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
GAUGES, &c.—*continued.*			
Apparatus for moderating or regulating the feeding of the pulp in paper machines. (*Communicated by Jean Baptiste de Mulder.*)	2487	3rd Sept. 1867	Charles Tessier.
Improvements in apparatus for regulating automatically the supply of gas, air and water, or any one or more of them, to steam-boilers heated by gas or otherwise, and for utilizing the heat of the gases produced or heated by combustion.	2674	23rd Sept. 1867	Charles Ritchie.
Improvements in mechanism or arrangements applicable to steam-boilers and their furnaces, the said mechanism or arrangements being especially applicable to those boilers and their furnaces with which gas is the combustible used. (*float or automatic regulator.*)	2772	2nd Oct. 1867	Charles Ritchie.
Improved methods of constructing steam generators for engines, new furnaces connected therewith, and the mode of working them, with machinery in combination with the uses to which they are applicable. (*automatic gauge.*)	2792	4th Oct. 1867	Henry Pinkus.
An improved mode of and means for preventing the bursting of the tubes in steam and water pressure gauges, and other tubes or pipes, from the effects of cold. (*Communicated by Ernest Dubois.*)	2925	18th Oct. 1867	Edward Casper.
Safety apparatus for steam-boilers or steam generators - - - - -	3472	6th Dec. 1867	John William Kenyon. Robert Arthur Armitstead.
GLASS ; APPLICATIONS OF GLASS.			
Improvements in the manufacture of chlorine, and in the production of artificial oxides of manganese for employment both in that and other manufactures. (*used in glass making.*)	133	18th Jan. 1867	Walter Weldon.
Improvements in glass blowing and in apparatus therefor. (*Communicated by Léon Bandoux.*)	143	19th Jan. 1867	William Bull.
Manufacture and construction of ecclesiastical and architectural devices and decorations - -	184	24th Jan. 1867	William Phillips Phillips. George Phillips. Daniel Pearce.
Gilding, bronzing and colouring engraved, embossed and cut glass, and all other kinds of glass.	265	31st Jan. 1867	Edward Hugh Hughes.
An improved process for vitrifying iron, cast-iron and steel.	322	5th Feb. 1867	Joseph Ballouhey.
An improved machine for cleaning and polishing the surface of glass, marble, metal and other smooth surfaces.	462	20th Feb. 1867	Robert Kunstmann.
Steam and gas engines - - - - - (*Communicated by Charles E. Emery.*)	571	28th Feb. 1867	Alfred Vincent Newton.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
GLASS—*continued.*			
An improved mode of and means for producing pictures, designs, letters and other characters or figures upon glass, metal, wood and other materials.	732	13th March 1867	Edward Lee.
Globular and other forms of glass for ornamenting mirrors and other reflecting surfaces, and for making up other articles of glass.	835	22nd March 1867	Edward Samuel Tucker.
Producing opalline pictures into china, glass, porcelain or any other enamelled surface.	955	30th March 1867	George Higginson.
Improved means of producing surfaces in relief or in intaglio for printing and other purposes. (*printing on glass.*) (*Communicated by André Adolphe Disderi.*)	968	1st April 1867	Clinton Edgcumbe Brooman.
An improved mode of making windows in imitation of stained glass.	1120	15th April 1867	John William Breakell.
Bowls, jugs, and all kinds of covered and uncovered articles or vessels made of glass, china, stone or earthenware and other plastic materials.	1174	23rd April 1867	Elisha Leigh.
Improvements in the treatment of fibrous materials and in apparatus to be used in such treatment. (*glass milling rollers.*)	1207	26th April 1867	John Watson Burton.
Arrangement and construction of furnaces for steam-boilers and various other useful purposes. (*for glass annealing.*) (*Communicated by Emmanuel Minary.*)	1495	20th May 1867	John Garrett Tongue.
Improvements in producing letters in gold, silver and other metals on glass, and in implements employed for that purpose.	1589	29th May 1867	Frederick Joseph Brean.
A new means for procuring the more perfect combustion in the burning of fuel. (*in glass furnaces.*)	1610	30th May 1867	Tony Petitjean.
Making frames for looking-glasses, pictures and mouldings.	1789	19th June 1867	Morris Lyons.
An improved method of treating glass in order to produce tablets and other articles.	1914	29th June 1867	George Rees.
Construction of furnaces employed in the manufacture of glass.	2075	15th July 1867	Francis Dixon Nuttall.
Utilizing certain materials or products obtained during the manufacture of steel and iron.	2114	19th July 1867	James Hargreaves.
Insulators for telegraphic wires - - - (*use of blown glass.*) (*Communicated by David Brooks.*)	2192	29th July 1867	George Davies.
Improvements in the means of moulding subjects or designs in glass or crystal for ornamenting them inwardly, and improved tools or apparatus in connection therewith - - -	2257	5th Aug. 1867	Léon Victor Hue. Charles Roziére.
Improvements in wine glasses and in stands or holders for the same.	2595	13th Sept. 1867	James Murdoch Napier.
A new or improved material for decorative purposes.	2632	19th Sept. 1867	Jesse Rust.
Improved methods of constructing steam generators for engines, new furnaces connected therewith, and the mode of working them, with machinery in combination with the uses to which they are applicable. (*heating in glass making.*)	2792	4th Oct. 1867	Henry Pinkus.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
GLASS, &c.—*continued.*			
Improvements in casting metals, glass and other materials, and in apparatus employed for this purpose.	2912	17th Oct. 1867	Jacques Rives.
An improved shuttle eye - - - -	2928	18th Oct. 1867	William Henry Tasker.
Ornamenting transparent or partially transparent glass.	2983	24th Oct. 1867	Henri Réde St. Martin.
Manufacture of glass globes and other hollow forms for gaseliers, chandeliers, candles, lamps and other similar purposes.	3158	8th Nov. 1867	Sibbit Landells.
Ornamenting bottles and other articles of glass or crystal. (*Communicated by Charles Julien Aubertin.*)	3250	16th Nov. 1867	Clinton Edgcumbe Brooman.
Globes and glasses for the transmission of artificial and other light.	3404	30th Nov. 1867	Samuel Edward Tyrrell Steane.
Improvements applicable to waterclosets and pumps connected therewith, which latter improvements are applicable to lift-pumps generally. (*making the pans of glass.*)	3430	3rd Dec. 1867	John Hays Wilson.
Improvements in furnaces and in effecting the combustion of fuel therein. (*for manufacture of glass.*)	3468	5th Dec. 1867	Thomas Joseph Leigh.
Treatment of gutta-percha, indian-rubber, Honduras gum, and the other allied gums, for the production of a preparation or preparations applicable as a varnish, cement, paint, stain, water and air-proof material, solid or elastic material and for other purposes. (*substitute for glass.*) (*Communicated by Daniel Reed.*)	3542	13th Dec. 1867	Edward Reed Sintzenich.
Manufacture of soda and potassa - - -	3559	14th Dec. 1867	James Hargreaves.
Improvements in glass bottle house pot carriages and implements used in setting glass bottle house pots, which invention admits of improvements in the construction of furnaces for melting bottle or other glass in open pots.	3613	19th Dec. 1867	Edgar Breffit.
Improvements in furnaces for smelting glass or the materials employed therein, and for consuming smoke.	3702	30th Dec. 1867	James Davison.
See also "BOTTLES."			
GLOVES.			
Improvements in fastenings applicable to boots and shoes, gaiters, gloves, books, portemonnaies and other articles.	256	30th Jan. 1867	Saxon Macarthy.
Manufacture of envelope cases, blotting books and other articles, commonly called "writing" or "library sets," and other similar articles. (*glove boxes.*)	305	4th Feb. 1867	George William Betjemann.
Glove fastenings - - - - - (*Communicated by Marie Alfred Geminel.*)	656	8th March 1867	John Henry Johnson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
GLOVES—*continued.*			
Manufacture of double or tubular fabrics in warp machinery. (*for gloves, &c.*)	1310	4th May 1867	John Hemsley.
An improved manufacture of elastic woven fabric applicable to the manufacture of gloves, drawers, under-shirts, and other elastic articles usually made from looped or knitted fabrics - -	1998	8th July 1867	Archibald Turner. William Hemsley.
Manufacture of gloves, undershirts, drawers, socks, stockings, and other articles of clothing which are usually made from knitted or looped fabrics	2311	12th Aug. 1867	Archibald Turner. William Hemsley.
An apparatus for assisting swimming - - (*gloves.*)	2793	4th Oct. 1867	Alfred Ford.
Gloves - - - - - -	3149	7th Nov. 1867	James Wheeler.
Improvements in the manufacture of elastic fabrics, part of which invention is especially applicable to the production of shaped slipper fronts and similar articles. (*for gloves.*)	3173	9th Nov. 1867	Caleb Bedells.
Manufacture of gloves - - - - -	3670	26th Dec. 1867	Benjamin Bowen. James Benjamin Bowen.
GOVERNORS AND INDICATORS OF SPEED AND POWER FOR STATIONARY ENGINES AND MACHINERY; STARTING, STOPPING AND REVERSING APPARATUS; MACHINERY-BREAKS.			
Improved apparatus for regulating, controlling and for varying the speed of shafts and machinery.	51	8th Jan. 1867	Robert Robinson.
An improved apparatus for raising and lowering heavy bodies. (*stopping the chain.*)	159	22nd Jan. 1867	Jean Chrétien.
Breaks and apparatus for giving motion to machinery.	299	2nd Feb. 1867	Robert David Napier.
Engines and machinery employed in tilling land - (*turning.*)	300	2nd Feb. 1867	David Greig. Robert Burton. Frederick Parker.
Governors for steam and other motive-power engines - - - - - -	397	12th Feb. 1867	Henry Houldsworth Grierson. John McElroy.
Construction of windlasses - - - (*break.*)	442	18th Feb. 1867	William Horatio Harfield.
Governors for regulating the movements of steam-engines that they never can deviate from the speed required.	448	19th Feb. 1867	Amand Beniest.
Gas pressure governors - - - -	495	22nd Feb. 1867	William Edwin Heath.
Gas engines - - - - - (*governing or regulating speed.*)	499	23rd Feb. 1867	Arthur Kinder. William Barns Kinsey.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
GOVERNORS, &c.—*continued.*			
Improvements in steering apparatus and in machinery for stopping, starting and reversing heavy steam-engines.	559	28th Feb. 1867	Andrew Betts Brown.
An improved brake for sewing machines - - (*Communicated by John Augustus Minor and Robert Bowman.*)	561	28th Feb. 1867	Edward Thomas Hughes.
An universal isochronous pendulum speed regulator for motive engines.	580	1st March 1867	Frederic Angelus Peter Vandeputte.
Machinery or apparatus used in connection with calico printing machines. (*applying breaks.*)	628	6th March 1867	William Tomlinson.
Engines worked by heated air and by other suitable heated gas or gases. (*regulating power and speed.*)	633	7th March 1867	Alphonse Louis Normandy.
Hydraulic motors - - - -	641	7th March 1867	Paul Rapsey Hodge.
Mode of regulating the speed of drying cylinders or rollers employed by dyers, scourers and bleachers.	674	9th March 1867	Auguste Rupp.
Governors of steam and other motive-power engines.	700	11th March 1867	Robert Wilson.
Instruments for ascertaining the speed of machinery	736	14th March 1867	John Benjamin Dancer.
Improved safety apparatus for mining cages, hoists and lifts. (*stopping the cages.*)	754	15th March 1867	John Povey Harper.
Heated air engines - - - -	776	18th March 1867	Francis Herbert Wenham.
Machinery for cutting channels in stone and for working in quarries. (*friction break.*) (*Communicated by George Jeffards Wardwell.*)	864	25th March 1867	William Edward Newton.
Improvements in the mode of and machinery for manufacturing watches, part of which improvements is applicable to lathes generally where great accuracy is required. (*stop-motion.*)	880	26th March 1867	John Wycherley.
A new method of reversing the motion of steam or other motive-power engines - -	897	27th March 1867	John Bruckshaw. Cornelius Cornes.
Machinery for cutting and spreading grasses -	918	28th March 1867	James Howard. Edward Tenney Bousfield.
Looms for weaving - - - (*break stop motion.*)	991	3rd April 1867	James Whitehurst. Thomas Walsh.
Milling machines - - - - (" *setting on*" *and stop motions.*)	1004	3rd April 1867	Joseph Henry Barker.
Improvements in the manufacture of spoons, forks and other similar articles, and in apparatus or machinery to be employed therein, parts of which said apparatus or machinery are applicable to other manufactures. (*regulating speed of press.*)	1055	9th April 1867	Daniel Joseph Fleetwood.
Improvements in machines for winding yarn or thread on to bobbins, spools or similar surfaces, parts of which improvements are applicable to self-acting mules and like machines for spinning, doubling or twisting fibrous materials. (*stopping mechanism.*)	1128	16th April 1867	William Weild.
Looms for weaving - - - (*reversing movement.*)	1269	1st May 1867	Erastus Brigham Bigelow.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
GOVERNORS, &c.—*continued.*			
Friction coupling breaks applicable to hoisting apparatus and other purposes.	1373	9th May 1867	Thomas Aldridge Weston.
Governors for steam and other engines - - (*Communicated by Daniel F. Mosman.*)	1390	10th May 1867	Charles Hooper Trask.
An improved compound lever for working railway points and signals, applicable also to other purposes. (*applicable to reversing motions.*)	1579	28th May 1867	Thomas Frederick Cashin.
Certain improvements in apparatus to be employed in the preparation of cotton and other fibrous materials. (*stop motion.*)	1734	13th June 1867	Robert Hyde Barton.
An improved apparatus for utilizing the power spent in stopping or retarding the motion of carriages and other vehicles and machinery, as also the power produced by carriages and other vehicles when moving down inclines. (*Communicated by Jules Péan.*)	1762	17th June 1867	Charles Denton Abel.
Governors for marine engines - - - - (*Communicated by Farcot et ses fils.*)	1839	24th June 1867	William Edward Newton.
Centrifugal governors and means of governing steam and other engines - - -	1936	3rd July 1867	Henry Davey. David Davy.
Machinery for preparing and spinning or doubling cotton and other fibrous materials - - (*break.*)	2076	15th July 1867	John Muir Hetherington. Robert Walker Pitfield.
Letterpress and lithographic printing machinery -	2113	18th July 1867	Adam Paton.
Steam-engines - - - -	2169	26th July 1867	Jonathan Edge.
Brakes for cotton lappers or scutchers - - (*Communicated by Richard Kitson.*)	2242	2nd Aug. 1867	John Garrett Tongue.
Improvements in apparatus for indicating and registering the pressure of steam in steam generators, and the pressure in hydraulic presses and other vessels or chambers, which improvements are also applicable to indicating and registering pressure and vacuum in steam-engines, the vacuum in condensing apparatus, also to indicating and registering the combined pressure of the steam or other power employed to give motion to an engine, and the speed of such engine or other machinery, also to indicating and registering barometrical variations. (*Communicated by Bernhard August Schäffer and Christian Friedrich Budenberg.*)	2249	3rd Aug. 1867	Arnold Budenberg.
Certain improvements in steam-engines - -	2284	8th Aug. 1867	George Holcroft. William Nathan Dack.
Machinery for boring, cutting or working in rock, coal and other mineral. (*reversing apparatus.*)	2503	4th Sept. 1867	Frederick Bernard Dœring.
Improvements in the manufacture of tobacco and in machinery or apparatus therefor - - (*stopping the drum.*)	2699	25th Sept. 1867	Andrew Tod. James Heatley, jun^{r}.
Construction and mode of propelling and maneuvering floating batteries and other vessels intended for the purposes of naval defence and attack. (*electro-magnetic governing apparatus.*)	2743	28th Sept. 1867	John Elder.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
GOVERNORS, &c.—*continued.*			
Improved methods of constructing steam generators for engines, new furnaces connected therewith, and the mode of working them, with machinery in combination with the uses to which they are applicable. (*automatic governor.*)	2792	4th Oct. 1867	Henry Pinkus.
Certain new and useful improvements in governors for steam and various other engines. (*Communicated by Reuben Kidder Huntoon.*)	2913	17th Oct. 1867	Charles Stephen Lynch.
Machinery or apparatus applicable to cages or hoists used in mining or lifting machines. (*stopping the cage.*)	2934	18th Oct. 1867	John King.
Steam governors and valves - - - (*Communicated by Francis Johnston Nutz, Philip Estes De Forrest Fairchild and Edward Payson Willson.*)	2980	23rd Oct. 1867	Alexander Melville Clark.
Steam-engine indicators - - - -	3012	26th Oct. 1867	John Addy Hopkinson. Joseph Hopkinson.
Locomotive engines - - - - (*starting and reversing.*)	3023	26th Oct. 1867	William Kendall.
Improvements in machines for printing from copper, steel and other metal plates, applicable also for printing from lithographic stones - - (*stops.*)	3034	28th Oct. 1867	Alfred James Waterlow. Walter Blandford Waterlow. Sydney Hedley Waterlow.
Machines for twisting lines, cords, ropes and cables, and hanking and coiling the same. (*stop motion.*) (*Communicated by Chauncey Orrin Crosby.*)	3045	29th Oct. 1867	Edward Thomas Hughes.
Governors of steam and other motive-power engines	3138	7th Nov. 1867	Charles Louis Hett.
Governors for obtaining uniform rotation - -	3142	7th Nov. 1867	William John Macquorn Rankine.
Improvements in rotary engines applicable as motors, pumps, meters and for other purposes, also in indicators applicable to such and other engines or meters and other purposes. (*Communicated by Arthur Perry Emery.*)	3219	13th Nov. 1867	Alfred Vincent Newton.
Machinery for ruling ornamental patterns or devices (*reversing.*)	3322	23rd Nov. 1867	Samuel Amphlet. Joseph Beverley Fenby.
Machinery for producing seamless tubes - - (*stop.*) (*Communicated by William Forman Brooks.*)	3333	25th Nov. 1867	Thomas Chalmers.
Certain improvements in mechanism or apparatus (termed drawing frames) employed for preparing cotton or other fibrous substances. (*sliver stop motion.*)	3338	26th Nov. 1867	Henry Greenhalgh.
Improvements in steam winches, which are also applicable to other similar purposes. (*stopping, starting, and reversing.*)	3425	2nd Dec. 1867	George Breen.
Improvements in elastic packings for the pistons of steam-engines and for other purposes, and in the machinery employed in the manufacture of such packings. (*stopping the machine.*)	3495	9th Dec. 1867	Edward Keirby.
Certain improvements in steam-engines - -	3512	11th Dec. 1867	George Holcroft. William Nathan Dack.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
GOVERNORS, &c.—*continued.*			
Improvements in breaks for railway and other carriages, and in signalling and other apparatus in connection therewith, which improvements are also partly applicable to other purposes. (*to controlling the speed of engines.*)	3597	18th Dec. 1867	Thomas Comfield the younger.
GRINDING AND CRUSHING CORN, GRAIN, SEEDS, &c.; DRESSING FLOUR; MILLSTONES; DECORTICATING GRAIN; GRINDING DRIED MEAT.			
Machinery for grinding, crushing, hulling or shelling various kinds of farm or vegetable produce, applicable also to the crushing or grinding of minerals and other hard substances.	566	28th Feb. 1867	John Bellerby the younger.
Machinery for manufacturing flour - - (*Communicated by John Brown, Alexander Hart, Allen Battey Ralph, James Hobart Cutler and Dexter Neuton Knight.*)	838	22nd March 1867	George Tomlinson Bousfield.
Improved apparatus for manufacturing and assorting semolina, and reducing the same to flour.	917	28th March 1867	Gustav Adolph Buchholz.
Apparatus for grinding corn, grain and other similar substances.	1172	23rd April 1867	Arthur Rigg.
Improvements in cutting and dressing millstones, and in apparatus to be employed for such purpose. (*Communicated by Samuel Golay.*)	1245	30th April 1867	George Davies.
An improved nutmeg-grater - - - (*Communicated by Henry Josiah Griswold.*)	1287	2nd May 1867	William Robert Lake.
Manufacture of flour - - - - -	1386	10th May 1867	John Norman. William Hay.
A new or improved machine or apparatus for filling sacks with grain, flour, bran, sugar, and other granular or pulverous substances. (*Communicated by Auguste Hourdain.*)	1492	20th May 1867	Charles Denton Abel.
An improved process of decorticating, crushing and treating dry peas.	2127	20th July 1867	Alexandre Sezille.
Means or apparatus for sorting, screening and classifying corn, seeds, flour or other substances which it may be desirable to classify. (*Communicated by Edmond Van Schepdael and Baptiste Bourgès.*)	2272	6th Aug. 1867	Hunter Henry Murdoch.
Improvements in the manufacture of wheat and other grain into flour, and in the machinery connected therewith.	2291	9th Aug. 1867	Thomas James Baker.
An improved machine intended to divide, break or crush all substances capable of being triturated, more especially bones and horny substances of every kind, for converting them into manure. (*Communicated by Eugène Anduze.*)	2441	27th Aug. 1867	William Edward Gedge.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
GRINDING CORN, &c.—*continued.*			
Machinery for hulling wheat and manufacturing semolina.	2508	4th Sept. 1867	Gustav Adolph Buchholz.
Apparatus for crushing beans, oats, and other grain or seed.	2627	18th Sept. 1867	Thomas Borrett Wilkinson.
Mounting and driving millstones - - -	2842	9th Oct. 1867	Richard Smith, junior.
An improved rice unhusking mill - - -	2856	11th Oct. 1867	John Charles Wilson.
Apparatus for decorticating rice and other grain - (*Communicated by Monsieur Joseph Perre.*)	2872	12th Oct. 1867	Hector Auguste Dufrené.
Machinery for decorticating or hulling rice and other grain - - - - - -	2916	17th Oct. 1867	Thomas Bell. John Richardson.
Apparatus used for grinding wheat or other grain -	2930	18th Oct. 1867	Thomas Kitchen.
Machiney or apparatus for decorticating, hulling or husking pearl barley or other similar grain.	3073	31st Oct. 1867	David Sykes.
Manufacture of wheaten flour and bread - -	3120	5th Nov. 1867	Robert Palmer. Henry Samuel Hird.
Improvements in the manufacture of wheat and other grain into flour, and in the machinery connected therewith.	3140	7th Nov. 1867	Thomas James Baker.
Manufacture of grindstones and other blocks or forms of artificial stone - - - - -	3193	11th Nov. 1867	Frederick Ransome. Henry Bessemer. Ernest Leslie Ransome.
An improved mode of treating cotton seed to obtain oil therefrom, and in machinery employed therein - - - - - - - (*subjecting to a grinding action.*)	3388	29th Nov. 1867	Thomas Rose. Robert Emerson Gibson.
An improved mode of and apparatus for decorticating and drying corn and other grain.	3424	2nd Dec. 1867	Jonah Hadley.
Apparatus for cleaning or decorticating cotton seed and other grains or seeds.	3443	3rd Dec. 1867	Nathaniel Grew.
Improvements in breaks for railway and other carriages, and in signalling and other apparatus in connection therewith, which improvements are also partly applicable to other purposes. (*to crushing mills.*)	3597	18th Dec. 1867	Thomas Comfield the younger.
Improved apparatus for cleaning grain or seeds and reducing the same to meal or flour.	3632	21st Dec. 1867	Jonah Hadley.
GRINDING AND CRUSHING MINERALS, CLAY, FIBROUS PLANTS, &c.; BREAKING STONE.			
Improvements in the means whereby tools or operating implements, instruments, appliances or parts of machinery or apparatus may be moved to and worked at various parts of articles or surfaces to be operated on by the same. (*crushing or pulverizing.*) (*Communicated by Norbert Belvallette.*)	105	15th Jan. 1867	Michael Henry.
Mode of and machinery for manufacturing bricks, tiles and other articles of clay.	151	21st Jan. 1867	Robert Kunstmann.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
GRINDING MINERALS, &c.—*continued.*			
Machinery or apparatus for breaking and grinding stone, ores and other hard materials.	456	20th Feb. 1867	Thomas Archer the younger.
Machinery for mining, cutting or working coal and other minerals, and for hammering metals and crushing minerals.	535	27th Feb. 1867	Andrew Howat.
Machinery for grinding, crushing, hulling or shelling various kinds of farm or vegetable produce, applicable also to the crushing or grinding of minerals and other hard substances.	566	28th Feb. 1867	John Bellerby the younger.
Treatment or preparation of straw and other fibrous materials for the manufacture of paper.	647	7th March 1867	Edward Lloyd.
Machinery for crushing stones, minerals and other like substances - - - - -	680	9th March 1867	Benjamin Walker. John Frederick Augustus Pflaum.
Lithographic stone grinding, graining, polishing, and ink and colour grinding apparatus.	775	18th March 1867	Thomas William Nicholson.
Engines and machines for washing, beating, grinding or reducing rags and other fibrous substances into paper pulp, and into fibres for yarns or cloth.	914	28th March 1867	William Wood.
Apparatus for the manufacture of bricks, tiles and other articles of plastic material. (*grinding clay.*) (*Communicated by Frederick Hertel.*)	954	30th March 1867	William Clark.
Apparatus for breaking down coal, stone and other minerals. (*Communicated by Theophile Guibal.*)	1137	17th April 1867	William Cochrane.
Improvements in the means and apparatus for pulverizing substances, more particularly applicable to the pulverization of materials for porcelain paste. (*Communicated by Carl Fredrik Tjulander and Johan Robert Alsing.*)	1206	26th April 1867	Charles Denton Abel.
Brick-making machinery - - - - (*crushing the clay.*) (*Communicated by John Scott Meredith and John Hanson Mitchell.*)	1393	10th May 1867	William Clark.
An improved reducing machine for grinding and pulverizing metallic ores and any other substances.	1939	3rd July 1867	Thomas Borlase.
A new or improved machine for crushing bones and other materials - - - - -	2010	9th July 1867	Edwin Crook. Frederick Crook.
Machinery or apparatus for crushing and pulverizing ores, stones and other hard substances.	2092	17th July 1867	Thomas Archer, junior.
Machinery and apparatus for preparing, shaping and drying peat and other vegetable and mineral substances - - - - -	2233	2nd Aug. 1867	Frederick Ludwig. Hahn Danchell.
Improvements in the method of and apparatus for treating certain vegetable substances in order to obtain fibrous materials and paper pulp therefrom. (*Communicated by Charles Gastaldetti and Joseph Vanzina.*)	2356	16th Aug. 1867	Michael Henry.
Machinery for cutting, crushing, bruising or otherwise preparing furze or gorse, straw, bark or other vegetable substances.	2373	17th Aug. 1867	Wallis Rivers Goulty.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
GRINDING MINERALS, &c.—*continued.*			
An improved machine intended to divide, break or crush all substances capable of being triturated, more especially bones and horny substances of every kind, for converting them into manure. (*Communicated by Eugène Anduze.*)	2441	27th Aug. 1867	William Edward Gedge.
Apparatus for feeding paints on the stone or stones on which they are ground - -	2464	29th Aug. 1867	John Paulin. Robert Davison Paulin.
Improvements in the means and apparatus for pulverizing substances, more particularly applicable to the pulverization of materials for porcelain paste. (*Communicated by Carl Frederik Tjulander and Johan Robert Alsing.*)	2975	23rd Oct. 1867	Charles Denton Abel.
Manufacture of grindstones and other blocks or forms of artificial stone - - -	3193	11th Nov. 1867	Frederick Ransome. Henry Bessemer. Ernest Leslie Ransome.
Improvements in machinery or apparatus for grinding bones, ores and other substances, a part of which improvements is applicable to foot-step bearings generally. (*Communicated by Edwin Pugh Baugh.*)	3393	29th Nov. 1867	John Henry Johnson.
Machinery for the manufacture of bricks and tiles - (*grinding clay.*)	3534	12th Dec. 1867	Peter Bawden.
Improvements in moulding and in the machinery or apparatus employed therefor - - - (*and crushing sand.*)	3585	17th Dec. 1867	William Simons. Archibald Carmichael.
GRINDING AND SHARPENING; FLAT GRINDING AND POLISHING; GRINDING-SURFACES; EMERY, SAND AND GLASS PAPERS AND CLOTHS.			
Improvements in the means whereby tools or operating implements, instruments, appliances or parts of machinery or apparatus may be moved to and worked at various parts of articles or surfaces to be operated on by the same. (*smoothing, polishing or burnishing.*) (*Communicated by Norbert Belvallette.*)	105	15th Jan. 1867	Michael Henry.
Certain improvements in apparatus for grinding "cards" to be employed in preparing cotton and other fibrous materials.	173	23rd Jan. 1867	Joseph Standring Dronsfield.
Machinery for cutting and polishing metals -	410	14th Feb. 1867	John Thompson.
An improved machine for cleaning and polishing the surface of glass, marble, metal and other smooth surfaces.	462	20th Feb. 1867	Robert Kunstmann.
Certain improvements in carding-engines to be employed for carding cotton and other fibrous materials - - - - (*grinding the "top cards."*)	542	27th Feb. 1867	Thomas Bispham Kay. Francis Hamilton.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
GRINDING, SHARPENING, &c.—*continued.*			
Machinery for grinding, crushing, hulling or shelling various kinds of farm or vegetable produce, applicable also to the crushing or grinding of minerals and other hard substances. (*rendering steel combs self-sharpening.*)	566	28th Feb. 1867	John Bellerby the younger.
Improvements in machinery for cutting, shaping and polishing mouldings and shapes of circular, oval, or irregular curved forms in stone, wood or other materials, part of such improvements being applicable for veneering mouldings of similar forms.	604	4th March 1867	Robert Thompson.
Improvements in machinery or apparatus for cleaning boots and shoes, also applicable to the cleaning of other articles - -	655	8th March 1867	Henry Churchman. Frederick Braby.
Improvements in means or apparatus for sharpening knives and other edged articles, which improvements are also applicable to grinding and polishing various surfaces.	765	16th March 1867	Richard Canham.
Lithographic stone grinding, graining, polishing, and ink and colour grinding apparatus.	775	18th March 1867	Thomas William Nicholson.
Improvements in setting razors and in the strops for that purpose.	895	27th March 1867	Jean Marie Laurent.
An improved artificial stone for grinding, whetting or polishing purposes, and a process for producing the same.	1000	3rd April 1867	George Edward Van Derburgh.
Machinery for preparing and spinning cotton and other fibrous materials - - - - -	1079	11th April 1867	James Higgins. Thomas Schofield Whitworth.
Improvements in steels and forks, and in sharpeners for knives, scissors and edged tools.	1101	13th April 1867	Ebenezer Stevens.
Machinery for grinding and polishing metal and other surfaces.	1105	13th April 1867	William Gregory.
Improved machinery for piercing and drilling tangs and scales for table knives and forks, table and butchers' steels, and butchers' knives - -	1359	8th May 1867	Joseph Nixon. Jabez Winterbottom.
An improved instrument for sharpening cutlery. (*Communicated by James Meyer, junior.*)	1491	20th May 1867	Alexander Melville Clark.
Saws and saw teeth - - - - - (*saw teeth for burnishing.*) (*Communicated by Ira Stillman Brown, Charles Noyes Brown and John Mason Gross.*)	1756	15th June 1867	William Robert Lake.
Improvements in guns, projectiles and cartridges, and in the construction of the same. (*burnishing projectiles.*)	1757	15th June 1867	George Clark.
Machinery for polishing, grinding and edging slabs of marble, slate and other minerals. (*Communicated by Stinson Hagaman.*)	2572	11th Sept. 1867	Alexander Melville Clark.
Improvements in means or apparatus for sharpening knives and other edged articles, which improvements are also applicable to grinding and polishing various surfaces.	2603	14th Sept. 1867	Richard Canham.
Apparatus for sharpening the blades or knives employed in mowing and reaping machines.	2763	1st Oct. 1867	William Mitchell.
Machinery for the manufacture of nails and spikes (*pointing.*)	2788	3rd Oct. 1867	George Mellor.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
GRINDING, SHARPENING, &c.—*continued.*			
Certain improvements in mechanism or apparatus employed for cutting paper, pasteboard, textile fabrics and similar substances or materials.	2911	17th Oct. 1867	Robert Craib Ross.
Apparatus for cleaning and polishing boots, shoes, knives, forks, plate and other articles.	2935	18th Oct. 1867	James John Holden.
Machinery for polishing cylinders - -	3126	6th Nov. 1867	Robert Leake. Joseph Beckett.
Improvements in machinery for cutting or dressing stone and in apparatus connected therewith. (*sharpening the dressing tools.*)	3354	27th Nov. 1867	Charles Coates.
Preparation of a substitute for emery paper -	3615	19th Dec. 1867	Reginald Chauncy.
Improvements in the mode of and machinery for making shot and shells for ordnance. (*polishing.*) (*Communicated by John Blake Tarr.*)	3688	28th Dec. 1867	Alfred Vincent Newton.
GUNPOWDER AND EXPLOSIVE COMPOUNDS; POWDER FLASKS; XYLOIDINE.			
Manufacture of gunpowder - - -	960	30th March 1867	Frederich Hahn.
Improvements in the preparation of explosive compounds and in making up cartridges or charges therewith.	989	2nd April 1867	John Fry Reeves.
Treating gun cotton - - - -	1129	16th April 1867	Eustace Carey Prentice. Thos. Richardson.
Improvements in explosive compounds and in the means of igniting the same. (*nitro-glycerine.*) (*Communicated by Alfred Nobel.*)	1345	7th May 1867	William Edward Newton.
Gunpowder for mining purposes - -	1408	13th May 1867	Gustav Adolph Neumeÿer.
Method of and materials for manufacturing ammunition boxes, pontoons, baggage and other waggons and carriages, and various equipments for military, naval and civil purposes. (*powder boxes.*)	2630	19th Sept. 1867	Thomas Charles Clarkson.
Treatment of xyloidine - - - -	2666	21st Sept. 1867	Daniel Spill.
Magazines or reservoirs for containing explosive compounds or liquids and gunpowder.	2999	24th Oct. 1867	Edward Matthew Palliser.
Apparatus for filling flasks, canisters and other receptacles, with gunpowder.	3078	1st Nov. 1867	George Haycraft.
Improvements in the treatment of gun cotton and charges or cartridges made therefrom, as also in the processes employed in their manufacture.	3127	6th Nov. 1867	Eustace Carey Prentice.
Production of materials suitable for blasting and other similar purposes. (*mixing nitro-glycerine.*) (*Communicated by Carl Dittmar.*)	3458	5th Dec. 1867	John Henry Johnson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
GUNPOWDER, &c.—*continued.*			
Manufacture of explosive and fulminating powders	3469	5th Dec. 1867	Paul Gustave. Louis Gabriel Designolle. John Castheaz.
Production of explosive compounds - -	3652	24th Dec. 1867	Frederick Augustus Abel.
GUTTA-PERCHA AND INDIA-RUBBER. (*Preparing, Treating, Vulcanizing.*)			
An improved process of preparing raw hide for the manufacture of various articles. (*substitute for vulcanized india-rubber.*)	394	12th Feb. 1867	William Henry Towers.
A new and useful process whereby leather, wholly or partially tanned, or animal tissue of any nature, is made hard, semi-elastic and transparent. (*substitute for vulcanized india-rubber.*)	651	7th March 1867	William Henry Towers.
Improvements in baking or hardening vulcanite or dental india-rubber and other similar compounds and preparations, and in apparatus employed for such purpose.	688	11th March 1867	Frederick Ryding.
Cutting india-rubber or other materials into strips or thread.	1193	24th April 1867	Frank Crossley.
Machinery for india-rubber thread cutting -	2280	7th Aug. 1867	Milton Hamer.
Improvements in the preparation of vulcanizable compounds and in the manufacture of articles therefrom.	2449	28th Aug. 1867	George Grainger Tandy.
An improved artificial compound chiefly designed for use as a substitute for india-rubber or caoutchouc. (*Communicated by Austin Goodyear Day.*)	3108	4th Nov. 1867	William Robert Lake.
Treatment of gutta-percha, indian-rubber, Honduras gum, and the other allied gums, for the production of a preparation or preparations applicable as a varnish, cement, paint, stain, water and air proof material, solid or elastic material and for other purposes. (*Communicated by Daniel Reed.*)	3542	13th Dec. 1867	Edward Reed Sintzenich.
GUTTA-PERCHA AND INDIA-RUBBER AS APPLIED IN VARIOUS MANUFACTURES.			
Waterproofing or encasing cartridges and other articles liable to injury by damp.	52	8th Jan. 1867	Eustace Carey Prentice.
An improved pneumatic apparatus for the treatment of diseases in an attenuated atmosphere. (*Communicated by George Hadfield.*)	55	8th Jan. 1867	William Edward Newton.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
GUTTA-PERCHA, &c.—*continued.*			
An improvement in elliptic or other elastic springs	70	11th Jan. 1867	Edwin Marcus Chaffee.
An improved machine for pulling flax and other similar crops. (*Communicated by Samuel Whitford Tyler.*)	228	28th Jan. 1867	George Haseltine.
Forming shafts, rollers, drums and wheels with india-rubber surfaces.	289	2nd Feb. 1867	John Poole.
Improvements in breech-loading needle fire-arms, and in cartridges for the same. (*Communicated by Felix Allemano and Alberto Barelli.*)	445	19th Feb. 1867	George Frederick Redfern.
Wheels for carriages and other vehicles - - (*Communicated by John Raddin.*)	470	21st Feb. 1867	George Haseltine.
An improved covering or cushion for horses' feet - (*Communicated by Samuel Adlam, jun^{r}.*)	533	27th Feb. 1867	George Haseltine.
An improved packing for piston rods, pump rods and valve spindles.	543	27th Feb. 1867	John McLintock.
A new and useful fabric for elastic stockings, stays or corsets, bandages and other similar and analogous articles.	592	2nd March 1867	Anne Catherine Laurys.
Improvements in or applicable to sewing-machines	636	7th March 1867	Ira Dimock. James Gresham.
Manufacture of needle cases - - - (*Communicated by Jules Doderet.*)	669	8th March 1867	Jules Eugène Asselin.
Washing machines - - - -	697	11th March 1867	Matthew Chamberlaine.
A combined slop pail and night commode -	706	12th March 1867	Abner Parkinson. David Sweaney.
An improved process for uniting cork or leather either separately or combined.	878	26th March 1867	Joseph Toussaint.
Manufacture of boot elastic web and other fabrics -	939	29th March 1867	William Gadd. Louis Baillon.
Certain new and useful improvements in paper machinery.	971	1st April 1867	Francis Curtis.
Stoppers or means for stopping the ears - - (*Communicated by Joseph Porter Michaels.*)	995	3rd April 1867	William Clark.
Cartridges for breech-loading fire-arms - - (*Communicated by Alfred Pierre Tronchon.*)	1002	3rd April 1867	Eugène Delessert.
Spring centres for doors and other purposes -	1043	6th April 1867	James Barker.
Machinery for picking and ginning cotton - (*Communicated by Enoch Osgood.*)	1068	10th April 1867	Alfred Vincent Newton.
Improvements in the manufacture of elastic cords or bands applicable to various purposes, such as for driving bands, blind cords, and other analogous purposes in which a certain degree of elasticity is required.	1133	17th April 1867	Archibald Turner.
An improvement in cartridges for fire-arms and ordnance.	1173	23rd April 1867	John Plews.
Preparation and application of mustard for curative purposes. (*Communicated by Paul Rigollot.*)	1212	26th April 1867	Emile Guenin.
Coverings for rollers of machines which are required to be smooth and elastic - -	1219	27th April 1867	Joseph Moseley. Charles Moseley.
Improvements upon the instrument called the spray producer. (*made of vulcanite.*)	1222	27th April 1867	James Dewar.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
GUTTA-PERCHA, &c.—*continued.*			
An improved apparatus for preventing the access of insects to the interior of dwellings, and to pictures, mirrors and articles of furniture. (*Communicated by John George De Coursey.*)	1238	29th April 1867	John Henry Johnson.
An improved hat cover - - - - -	1277	2nd May 1867	Auguste Brunier.
Machinery or apparatus for navigating the air -	1392	10th May 1867	William Smyth.
Cartridge holders more especially adapted for shooting coats and belts.	1413	13th May 1867	James Leetch.
An improved method of and apparatus for drawing off and refining liquors or liquids of any kind.	1421	13th May 1867	William Sodo.
Apparatus for stopping bottles and other vessels -	1437	15th May 1867	William Drake Tate.
Billiard tables - - - - - - (*Communicated by Hugh W. Collender.*)	1440	15th May 1867	Alfred Vincent Newton.
Improvements in wheeled carriages and in the construction of wheels and springs for such carriages and other vehicles - - - -	1441	15th May 1867	George Coles. James Archibald Jaques. John Americus Fanshawe.
Improvements applicable to the permanent way of railways - - - - - -	1442	15th May 1867	George Coles. James Archibald Jaques. John Americus Fanshawe.
Intaglio plate printing machinery - -	1447	16th May 1867	James Murdoch Napier.
Machinery for folding sheets of paper or other fabric or material.	1502	21st May 1867	Joseph Davies.
Machinery for folding paper - - - -	1536	23rd May 1867	Simon Atkinson. Thomas Atkinson.
Improvements in the manufacture of tobacco and other pouches, part of such improvements being applicable to the frames of other bags or receptacles.	1554	25th May 1867	Allen Oldroyd.
Covering buckles, saddle-trees, turrets, hooks and other metallic trimmings for carriages and harness, with a coating of vulcanized or hard rubber, gutta-percha or other gum.	1630	1st June 1867	Andrew Albright.
Artificial limbs - - - - - (*Communicated by Amasa A. Marks.*)	1663	6th June 1867	Thomas Brown.
Improvements in thrashing machines and other machines for dressing and separating grain, and in rotary screens to be used therein and for other purposes - - - - -	1709	11th June 1867	Richard Hornsby. John Bonnall. Henry Shield.
A combined step cover and wheel fender for carriages and other vehicles. (*Communicated by John Wood Gosling.*)	1721	12th June 1867	John Millward.
Manufacture of electric telegraphic conductors -	1770	17th June 1867	Matthew Gray.
Improvements in the manufacture of electrical telegraphic conductors and in the means or apparatus employed therein.	1772	17th June 1867	Matthew Gray.
Lifts or cages and tubs for raising minerals from pits or mines and for other like purposes.	1781	18th June 1867	Job Edwards.
Railway buffers - - - - -	1794	19th June 1867	Walter MacLellan.
Corking, stopping and securing the contents of champagne and other bottles. (*Communicated by Jeules Fisse and Gustave Thirion.*)	1899	29th June 1867	Percy Smith.
An improved elastic strap for garments - - (*Communicated by Phineas Taylor Barnum.*)	1970	5th July 1867	Charles Denton Abel.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
GUTTA-PERCHA, &c.—*continued.*			
Life buoys	2019	10th July 1867	James Samuel Hood.
Reeds and healds used in weaving	2068	13th July 1867	John Carter Ramsden.
Improvements in the construction of elastic rollers for squeezing yarns and fabrics, and for other purposes	2174	27th July 1867	John Smith. William Schofield.
Improvements in the preparation of hose for conveying water, which improvements are also applicable for the preparation of woven fabrics for cart covers and other similar purposes.	2224	1st Aug. 1867	James Quin.
Forming shafts, rollers, drums and wheels with india-rubber surfaces.	2232	2nd Aug. 1867	John Poole.
Manufacture of wheeled and other carriages or vehicles. (*Communicated by John Smalley Campbell.*)	2262	5th Aug. 1867	John Garrett Tongue.
Apparatus employed in athletic exercises	2265	5th Aug. 1867	William Prangley.
Improvements in utilizing certain waste materials and in manufacturing packing therefrom.	2326	13th Aug. 1867	Silvester Rait Wybrants.
Railway carriages	2381	19th Aug. 1867	Clemens Reifert.
Improvements in bottles and in the manufacture of caps or covers for the same.	2387	20th Aug. 1867	Alexander Southwood Stocker.
Manufacture of waterproof tubes	2394	21st Aug. 1867	Gustave Luyckx.
Elastic mattresses	2399	21st Aug. 1867	John Mangnall.
Springs for boots and shoes	2457	29th Aug. 1867	John Macintosh. William Boggett.
Padding for horse collars, saddles and harness	2517	5th Sept. 1867	George Henry Pierce.
A new or improved material to be used as a substitute for oiled silk, bladders, gut skins, india-rubber, and other waterproof materials and leather.	2604	14th Sept. 1867	John Jeyes.
Improvements in means or apparatus to be employed to sewing-machines, and to other machines wherein cams or cam surfaces are employed working in connection with trucks or rollers, by means of which they are in working rendered comparatively noiseless.	2610	16th Sept. 1867	William John Cunningham.
Method of and materials for manufacturing ammunition boxes, pontoons, baggage and other waggons and carriages, and various equipments for military, naval and civil purposes.	2630	19th Sept. 1867	Thomas Charles Clarkson.
Whips and whip holders (*Communicated by John Gibson, junr.*)	2653	20th Sept. 1867	William Edward Newton.
Supporting window sashes, shutters, doors and other similar structures.	2712	26th Sept. 1867	James Syme.
Machinery or apparatus for manufacturing india-rubber tubing.	2744	28th Sept. 1867	Milton Hamer.
India-rubber mats	2783	3rd Oct. 1867	George Pomeroy Dodge.
Railway and other carriages and various parts of the same.	2796	4th Oct. 1867	Joseph Offord.
Machinery for the manufacture of hats	2838	9th Oct. 1867	Henry Wallwork.
Apparatus for decorticating rice and other grain (*Communicated by Monsieur Joseph Perre.*)	2872	12th Oct. 1867	Hector Auguste Dufrene.
Improvements in locomotive engines, vehicles and appendages thereto, for better and safer working on railways, tramways and common roads.	2907	17th Oct. 1867	William Bridges Adams.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
GUTTA-PERCHA, &c.—*continued.*			
Improvements in stoppers for bottles, which improvements are also applicable to cocks for casks and other like receptacles - - -	2922	18th Oct. 1867	Francisco Prudencio. Frank Cooper. Joseph Francis Cotterell.
An improvement in the manufacture of bonnets and other like articles of apparel worn on the head by women and children.	2936	18th Oct. 1867	Charles Montagu.
Improvements in the permanent way of and in signalling on railways.	2955	21st Oct. 1867	John Hunter.
Manufacture of pressed leather - - -	2977	23rd Oct. 1867	Frederick John Bugg.
Apparatus for compressing air and for working pneumatic railways.	2978	23rd Oct. 1867	Frederic Seiler.
Improved apparatus for treating fractures of the limbs.	2979	23rd Oct. 1867	Christopher Samuel Jeaffreson.
An improved wheel for steam carriages to be used on common roads.	2986	24th Oct. 1867	Robert William Thomson.
Centrifugal machines for separating liquid from solid matter. (*Communicated by David M'Colley Weston.*)	3041	28th Oct. 1867	William Robert Lake.
Racks or holders for whips, canes and other like articles. (*Communicated by Edward Richmond.*)	3058	30th Oct. 1867	John Henry Johnson.
An improved artificial compound chiefly designed for use as a substitute for india-rubber or caoutchouc. (*Communicated by Austin Goodyear Day.*)	3108	4th Nov. 1867	William Robert Lake.
Improvements in the manufacture of waterproof fabrics and in articles formed of the same. (*Communicated by William Augustus Torrey.*)	3136	6th Nov. 1867	William Robert Lake.
Means and apparatus for covering wire with metal or other material.	3157	8th Nov. 1867	George West Royston Pigott.
Improvements in the manufacture of elastic fabrics, part of which invention is especially applicable to the production of shaped slipper fronts and similar articles.	3173	9th Nov. 1867	Caleb Bedells.
Machines for printing calico and other fabrics -	3257	16th Nov. 1867	James Murdoch Napier.
Covering buckles, saddle-trees, turrets, hooks and other metallic trimmings for carriages and harness, with a coating of vulcanized or hard rubber, gutta-percha or other gum. (*Communicated by Andrew Albright.*)	3258	16th Nov. 1867	William Robert Lake.
An improved method of coveying rotatory motion to axles. (*india-rubber spring.*)	3271	18th Nov. 1867	Kenelm John Winslow.
Waterclosets - - - -	3305	21st Nov. 1867	Henry James. Edward Drewett.
Machinery for the manufacture of paper - -	3347	26th Nov. 1867	James Hudson, jun^{r}.
Improvements in cases or covers for umbrellas, and in the umbrellas to which such cases or covers are to be applied.	3382	28th Nov. 1867	John Scholefield.
An improvement in the construction of easy chairs, settees, sofas, seats for railway and other carriages, and invalid hospital couches or carriages - - - - - -	3412	2nd Dec. 1867	Thomas Finer Widenham. John Reynolds.
An improved elastic material to be used as springs in boots and shoes, and in various other ways to which the same may be applicable.	3445	4th Dec. 1867	Christopher Paley.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
GUTTA-PERCHA, &c.—*continued.*			
Improvements in elastic packings for the pistons of steam-engines and for other purposes, and in the machinery employed in the manufacture of such packings.	3495	9th Dec. 1867	Edward Keirby.
Improvements in the manufacture of hats and bonnets, and in the apparatus employed therein -	3513	11th Dec. 1867	Henry Giles.
Treatment of paper and certain woven fabrics for rendering them ornamental and durable as articles of dress, and for decorative and ornamental purposes.	3535	12th Dec. 1867	Edward Reed Sintzenich.
Capsules or coverings for bottles and other like vessels.	3543	13th Dec. 1867	George Whitehead.
An improved construction of portable fountain -	3563	14th Dec. 1867	Eugene Rimmel.
Rails for railways - - - -	3661	24th Dec. 1867	Thomas Harbison.
Soles for boots and shoes - - - (*Communicated by John Chilcott.*)	3681	27th Dec. 1867	Alfred Vincent Newton.
Mounting wheels on axles, the same being specially applicable to railway wheels.	3779	9th Feb. 1867	Charles William Dixon.
HAIR-DRESSING AND PERFUMERY.			
Manufacture of envelope cases, blotting books and other articles, commonly called "writing" or "library sets," and other similar articles. (*perfume cases.*)	305	4th Feb. 1867	George William Betjemann.
Improvements in brushes for brushing hair by rotary motion, and in apparatus connected therewith.	508	23rd Feb. 1867	Charles Turner.
Globular and other forms of glass for ornamenting mirrors and other reflecting surfaces, and for making up other articles of glass. (*toilet stands.*)	835	22nd March 1867	Edward Samuel Tucker.
Manufacture of artificial hair - - -	1841	24th June 1867	Henry Rushton.
An improvement in the method of ornamenting bottles, vases and jars used for perfume or toilet purposes.	2570	11th Sept. 1867	Sydney Brown.
Chairs for the use of dentists, barbers, photographers or other persons, such invention also being applicable to other useful purposes.	2915	17th Oct. 1867	Otis Converse White.
Apparatus for brushing, combing, cleansing, drying and perfuming hair.	3254	16th Nov. 1867	Charles Ritchie.
Vessels and apparatus for the preserving and more convenient use of unguents. (*pomades.*)	3378	28th Nov. 1867	James Murdoch Napier.
Improvements in circular boxes for the purpose of abstracting their contents without removing the lid or cover. (*for aromatics.*)	3449	4th Dec. 1867	Robert Michael Letchford.
Manufacture of pomade for the human hair - - (*Communicated by Aimé Désiré Lavandier.*)	3639	21st Dec. 1867	John Garrett Tongue.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
HAMMERS, AXES, PICKS, SPADES, TROWELS.			
An improved combined tack-driver and carpet stretcher. (*Communicated by Thomas Jebb.*)	188	24th Jan. 1867	George Haseltine.
Hammers - - - - - - (*Communicated by Joseph A. Veazie.*)	202	25th Jan. 1867	William Edward Newton.
Hammers to be worked by steam or other fluid -	440	18th Feb. 1867	Robinson Thwaites. Edward Hamer Carbutt. John Sturgeon.
An improved lubricator or tallow cup - - (*for steam hammers.*)	507	23rd Feb. 1867	John Bates.
Steam hammers - - - - - (*Communicated by William Sellers and Coleman Sellers.*)	644	7th March 1867	William Edward Newton.
Handles of spades, shovels and forks, and other similar articles.	803	20th March 1867	John William Yates.
Hammers - - - - - (*Communicated by George Selsor and William Cook.*)	1067	10th April 1867	John Henry Johnson.
Manufacture of bricklayers' and other trowels -	1321	6th May 1867	James Ball.
Valves for steam and other fluids - - - (*for steam-hammers.*)	1384	10th May 1867	William Bracewell. William Pickup. Benjamin Lund.
Treating iron to obtain metallic compounds for various uses. (*for machine tools.*)	1461	17th May 1867	Andrew Linmere Dowie.
A new or improved engine or machine for obtaining and applying motive-power. (*applicable as steam hammers.*)	1604	30th May 1867	James Francombe.
Improvements in steam and other hammers whereby to effect economy in the use of the steam or other fluid actuating said hammers.	1944	3rd July 1867	David Davy.
Forge hammers - - - - -	2240	2nd Aug. 1867	William Horton.
An improved carpet stretcher and tack driver - (*Communicated by William Brown.*)	2475	31st Aug. 1867	Alexander Horace Brandon.
Steam or other power hammers - - -	2676	23rd Sept. 1867	James Fletcher the younger.
Improvements in the manufacture of horse nails and other nails, and in machinery used therein -	2733	27th Sept. 1867	John Huggett. John Albert Huggett.
Rotary spaders or digging machines for tilling land.	3199	12th Nov. 1867	John Thomas Brown Porter.
A self-acting metal breaker - - -	3555	14th Dec. 1867	Francis Berry.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
HARNESS, SADDLES, CURBS, WHIPS; RELEASING FROM HARNESS; SHEARING AND GROOMING HORSES; NOSE-BAGS.			
Improvements in the manufacture of boots and shoes, and in machinery or apparatus therefor, which improvements are also equally applicable to the manufacture of "portemonnaies," travelling bags, parts of harness, and in fact to almost all such manufactures as require fixing, basting, cementing, sewing or stitching. (*Communicated by Jules Constant Touzet.*)	206	26th Jan. 1867	Bristow Hunt.
Improvements in carriages or vehicles, and in securing or harnessing draught animals thereto -	388	12th Feb. 1867	William Stratford.
Bridle bits - - - - - -	638	7th March 1867	Henry William Achgelis.
Bridles and reins connected therewith - - (*Communicated by Samuel Brubaker Hartman.*)	675	9th March 1867	John Garrett Tongue.
Reins for horses - - - - - (*Communicated by John Muir, Mary Ann Wilson Ringler and Sarah Emma Kelly.*)	853	23rd March 1867	John Garrett Tongue.
Saddle stirrups - - - - - (*Communicated by Osborne Macdaniel.*)	912	28th March 1867	William Clark.
Improvements in cutting hair off horses or other animals, and in the machinery or apparatus employed therefor.	982	2nd April 1867	James Shanks.
Fittings for stables, harness rooms and cow houses.	993	3rd April 1867	James Musgrave.
An improved safety-bridle for horses - -	1001	3rd April 1867	Albert Gaius Hills.
Means for checking and guiding horses - - (*Communicated by William Clark and William Griffin.*)	1192	24th April 1867	William Robert Lake.
Improvements in the manufacture of collars for horses and other animals, and in apparatus to be used in the said manufacture.	1343	7th May 1867	Robert Smith.
An improved self-acting and ventilating nose or feed bag for horses - - - (*Partly communicated by Nathaniel Knight.*)	1395	11th May 1867	John Adams Knight. Charles Bastand.
Covering buckles, saddle-trees, turrets, hooks and other metallic trimmings for carriages and harness, with a coating of vulcanized or hard rubber, gutta-percha or other gum.	1630	1st June 1867	Andrew Albright.
Racks or holders for whips, canes and other like articles. (*Communicated by Edward Richmond.*)	1647	4th June 1867	John Henry Johnson.
Saddles - - - - - -	1740	14th June 1867	Donat Edmond M^{c}Mahon.
Apparatus for sewing saddlery and other leather or strong materials. (*Communicated by Auguste Jacques Hurtu and Victor Joseph Hautin.*)	1798	20th June 1867	Alexander Melville Clark.
Padding for horse collars, saddles and harness -	2517	5th Sept. 1867	George Henry Pierce.
Method of and materials for manufacturing ammunition boxes, pontoons, baggage and other waggons and carriages, and various equipments for military, naval and civil purposes. (*traces and reins.*)	2630	19th Sept. 1867	Thomas Charles Clarkson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
HARNESS, &c.—*continued.*			
Whips and whip holders - - - - (*Communicated by John Gibson, jun^r.*)	2653	20th Sept. 1867	William Edward Newton.
Improved apparatus for disconnecting conveyances from animals drawing the same.	2797	4th Oct. 1867	Robert Ellis.
Pack-saddles - - - - - -	2897	15th Oct. 1867	Henry Astbury Leveson.
Covering buckles, saddle-trees, turrets, hooks and other metallic trimmings for carriages and harness, with a coating of vulcanized or hard rubber, gutta-percha or other gum. (*Communicated by Andrew Albright.*)	3258	16th Nov. 1867	William Robert Lake.
Horses' bits and stirrups - - - - (*Communicated by William Dale and George Henry Gardner.*)	3438	3rd Dec. 1867	Henry Francis Gardner.
Saddles - - - - - -	3611	19th Dec. 1867	John Clay.
Holders for holding or gripping reins, whips and other articles.	3666	24th Dec. 1867	William Hewitt.
HATCHING EGGS.			
Apparatus for hatching eggs - - -	640	7th March 1867	Colonel Stuart Wortley.
Machines for hatching eggs - - -	1632	3rd June 1867	Theophilus Horrex.
HATS, CAPS, BONNETS, LADIES' CAPS, CAP-FRONTS; COVERINGS FOR THE HEAD, HEAD DRESSES, HEAD ORNAMENTS.			
Machinery for felting hat bodies - - - (*Communicated by Job William Blackham.*)	97	14th Jan. 1867	George Haseltine.
An improved covering or protection from sun or weather, adapted for personal use or wear.	132	18th Jan. 1867	Charles Bateman Marsden.
A new and improved process of treating skins in order to separate therefrom the hair and wool, and in the preparation of the hair for the manufacture of hats. (*Communicated by Auguste Fraysse, jun^r.*)	172	23rd Jan. 1867	Henri Adrien Bonneville.
Improved machinery for blocking hats - - (*Communicated by William Case Griswold and Julius Sheldon.*)	185	24th Jan. 1867	William Edward Newton.
Improvements in hats and other coverings for the head, and their bodies or foundations or in similar articles, and in the means and appliances for producing the same - - -	247	30th Jan. 1867	John Harcourt Brown. William Bull.
Manufacture of hats - - - -	301	2nd Feb. 1867	Charles Vero.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
HATS, &c.—*continued.*			
Certain improvements in machinery or apparatus for pressing and shaping hats, bonnets or coverings for the head, made from straw or other materials.	345	7th Feb. 1867	Samuel Howard.
Treating vegetable substances chiefly applicable to the manufacture of paper pulp and fibres. (*for making hats.*) (*Communicated by Benjamin Chew Tilghman.*)	385	11th Feb. 1867	William Edward Newton.
Brooch and other fastenings - - - (*for bonnet and head dress ornaments.*)	685	11th March 1867	Joseph Josiah Blackham.
Improved apparatus for pouncing hats - -	758	16th March 1867	Emile Nougaret.
Ironing, pressing, finishing and damping machinery. (*for hatters.*)	793	19th March	James Moore Clements.
Machinery for the manufacture of hats or coverings for the head.	942	30th March 1867	Joseph Edwin Ward.
Hat guards - - - - -	1154	20th April 1867	Levi Davis.
An improved hat cover - - - -	1277	2nd May 1867	Auguste Brunier.
Improvements in the manufacture of hats, caps, bonnets and other coverings for the head, and the foundations thereof or similar articles, and in the means and appliances for producing the same - - - - -	2203	30th July 1867	John Harcourt Brown. William Bull.
Felting machines - - - - (*Communicated by James Seeley Taylor.*)	2255	3rd Aug. 1867	William Wilson.
Apparatus for uniting the brims to hat shapes or foundations.	2383	20th Aug. 1867	Alexandre Martin.
A new or improved material to be used as a substitute for oiled silk, bladders, gut-skins, india-rubber, and other waterproof materials and leather. (*for hat bodies.*)	2604	14th Sept. 1867	John Jeyes.
Method of and materials for manufacturing ammunition boxes, pontoons, baggage and other waggons and carriages, and various equipments for military, naval and civil purposes. (*covering helmets, making hat cases, &c.*)	2630	19th Sept. 1867	Thomas Charles Clarkson.
Ventilators for hats and other coverings for the head.	2655	21st Sept. 1867	Percy Crause.
An improved fastener for neckties or other similar articles for ladies' or gentlemen's use - - (*cap and bonnet strings.*)	2723	26th Sept. 1867	Thomas Vaughton. Oliver Vaughton.
An improved hat-blocking machine - - (*Communicated by Julius Sheldon.*)	2728	27th Sept. 1867	Alexander Melville Clark.
A new and improved process of treating skins in order to separate therefrom the hair and wool, and in the preparation of the hair for the manufacture of hats. (*Communicated by Auguste Frayssé, jun^{r}.*)	2736	28th Sept. 1867	Henri Adrien Bonneville.
Manufacture of hats and machines for producing the same.	2742	28th Sept. 1867	Henry Killogg.
Machinery for the manufacture of hats - -	2838	9th Oct. 1867	Henry Wallwork.
Improved machinery or apparatus for planking the bodies of hats.	2855	11th Oct. 1867	Edward Haigh.
Hats and other similar coverings for the head -	2882	14th Oct. 1867	Edward Ward.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
HATS, &c.—*continued.*			
Improvements in the manufacture of hats and bonnets, and in the apparatus employed therein. (*Communicated by Chauncey Orrin Crosby.*)	2927	18th Oct. 1867	Edward Thomas Hughes.
An improvement in the manufacture of bonnets and other like articles of apparel worn on the head by women and children.	2936	18th Oct. 1867	Charles Montagu.
An improved method of and apparatus for clearing skins destined for hatters' furs, from the coarse hairs (kemp, bristles or sleekcoats) by combustion.	3065	31st Oct. 1867	Ernest Donner.
Construction of hats and caps - - -	3077	1st Nov. 1867	Hugh Hunter. George Scroggie Hunter.
An improved hat cover - - - - (*Communicated by Auguste Brunier.*)	3086	2nd Nov. 1867	William Edward Gedge.
Certain improvements in the manufacture of hats -	3262	18th Nov. 1867	Richard Husband.
Certain improvements in the manufacture of waterproof or liquid-proof paper or glazed paper or fabrics. (*for lining hats.*)	3437	3rd Dec. 1867	John Thorpe.
Improvements in the manufacture of hats and bonnets, and in the apparatus employed therein.	3513	11th Dec. 1867	Henry Giles.
Treatment of paper and certain woven fabrics for rendering them ornamental and durable as articles of dress, and for decorative and ornamental purposes. (*hats and caps.*)	3535	12th Dec. 1867	Edward Reed Sintzenich.
An improved apparatus to manufacture the rims of hats. (*Communicated by Jean Prosper Morlot.*)	3601	18th Dec. 1867	Henri Adrien Bonneville.
A hat protector or apparatus for preserving hats and caps from rain, dust or otherwise - -	3671	26th Dec. 1867	Ernest Charles Jetot. Emile Hortensius Charles Cross. Marie Marguerite Aimee d'Eimar de Jabrun.
An improved machine for cutting the hair or fur from skins, for hat-making, and for the manufacture of felt.	3703	30th Dec. 1867	Joseph Aschermann.
Improvements in the manufacture of hats and other felted articles of wearing-apparel, and in machines employed for these purposes. (*Partly communicated by Rudolf Eickemeyer.*)	3716	31st Dec. 1867	William Wilson.
Mechanism or apparatus to be employed in the manufacture of felt hats.	3723	31st Dec. 1867	James George Crompton.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
HEATING AND EVAPORATING; REGULATING HEAT.			
Apparatus for evaporating and concentrating cane juice and other juices and liquids. (*Communicated by George Brocklehurst.*)	5	1st Jan. 1867	Michael Henry.
Apparatus for evaporating and boiling saccharine liquors.	22	3rd Jan. 1867	Walter Knaggs.
Improvements in apparatus for heating water and delivering water to steam-boilers, which improvements are also applicable to other purposes.	27	4th Jan. 1867	Josiah Lane.
Steam jackets for steam-engines - - -	35	5th Jan. 1867	Edward Alfred Cowper.
Pottery kilns - - - - -	60	9th Jan. 1867	Henry Doulton.
Improvements in bakers' and other ovens, and also in scrap and other furnaces.	80	11th Jan. 1867	John Tomlinson.
Boiler apparatus of portable steam-engines - -	162	22nd Jan. 1867	William Exall.
Puddling and other furnaces for melting, boiling or heating iron - - - - -	210	26th Jan. 1867	John Allcock Jones. Richard Howson.
Improvements in the heating of malt kilns and other apparatus of a similar character, and the warming of the interiors of churches and other large buildings, which invention is also applicable to causing the consumption of smoke from open fire-places.	249	30th Jan. 1867	Thomas Prideaux.
Improvements in steam-boilers and in boilers used for heating and warming purposes - -	276	1st Feb. 1867	William Fisken. David Fisken.
Boilers or apparatus applicable to the generation of steam and to other purposes.	303	2nd Feb. 1867	Benjamin Harlow.
Apparatus for heating with hot water - -	349	7th Feb. 1867	Henry Kinnaird York.
Utilizing of mineral and other oils for the production of heat and for illuminating purposes.	391	12th Feb. 1867	Sir James Young Simpson, Baronet.
An improved method of consuming smoke in furnaces.	454	20th Feb. 1867	William Harrison.
Improvements in the application of certain hydrocarbons to the obtainment of light and heat, and in the apparatus or means employed therein (*Communicated by Adrien Muller and Ignace Matheï.*)	458	20th Feb. 1867	John Henry Johnson.
Improvements in generating steam and vaporizing liquids, and in apparatus employed therein -	514	25th Feb. 1867	John Christopher Rees Weguelin. Benjamin Hirst.
An improved mode or means for actuating motive-power engines, and improvements in the apparatus employed therefor.	558	28th Feb. 1867	Andrew McCallum.
Generating heat by the admixture and combustion of a hydrocarbon vapor, air and the gaseous components of steam - - - (*Communicated by Henry Rutger Foote.*)	560	28th Feb. 1867	Stillman Boyd Allen. Jairus Handy Winsor.
Ovens and kilns for drying and burning bricks and other articles.	562	28th Feb. 1867	Jacob Buhrer.
Improvements in the means and apparatus for producing oxygen, and in the application of the same for metallurgical and other purposes. (*producing high temperatures.*) (*Communicated by Henri Adolphe Archereau.*)	568	28th Feb. 1867	William Clark.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
HEATING, &c.—*continued.*			
Improvements in means or apparatus for generating, superheating and condensing steam, and heating or boiling water or other liquids, parts of which are applicable to other purposes -	601	4th March 1867	James Marchent. John Parker.
Improvements in the utilization of mineral and other oils for the production of heat, and in the apparatus employed therefor.	616	5th March 1867	James Edward Duyck.
Manufacture of gas - - - - -	624	6th March 1867	John Thompson.
Improvements in or applicable to certain marine and stationary land boilers for generating steam.	626	6th March 1867	Edward Storey.
Apparatus for hatching eggs - - -	640	7th March 1867	Colonel Stuart Wortley.
An improved mode of generating steam - -	645	7th March 1867	John Garrison Woodward.
Improvements in the manner of reducing and refining metallic ores, more particularly ores of iron, and in converting iron into steel, and in apparatus to be used in connection therewith.	652	7th March 1867	Silas Covell Salisbury.
Apparatus connected with steam-boilers - -	679	9th March 1867	Robert David Napier.
Improvements in baking or hardening vulcanite or dental india-rubber and other similar compounds and preparations, and in apparatus employed for such purpose.	688	11th March 1867	Frederick Ryding.
Improvements in supplying heated air to furnaces and fires, and in apparatus connected therewith, which apparatus is also applicable to burning smoke - - - - -	741	14th March 1867	William Hamer. Joseph Davies.
Steam cooking and baking apparatus - -	746	15th March 1867	William Henry Graveley. James Ewing.
Improvements in boilers or steam generators and in valves or plugs connected therewith. (*water heaters.*)	756	16th March 1867	Thomas Cowburn.
Boilers and apparatus for generating steam and evaporating fluids.	757	16th March 1867	Thomas Dunn.
Steam-engines and boilers - - - - (*superheaters.*)	771	16th March 1867	Edward Ellis Allen.
Improved apparatus for warming or heating buildings.	777	18th March 1867	Henry Justinian Newcombe.
Improvements applicable to steam-boilers and engines, for economizing fuel in the generation of steam, and in the apparatus connected therewith. (*heating feed water.*)	783	19th March 1867	John Robinson.
An improved mode of and apparatus for warming and ventilating buildings.	791	19th March 1867	Matthew Semple.
Improvements in steam-boilers and in apparatus for heating the same, and also for obtaining heat for other purposes.	809	20th March 1867	John Russell Swann.
Steam heating and ventilating apparatus - - (*Communicated by Adolph Sternfeld.*)	827	21st March 1867	George Haseltine.
Furnaces for evaporating brine and for other heating purposes - - - - -	830	22nd March 1867	George Cross. Richard Evans.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
HEATING, &c.—*continued.*			
Improvements in machinery or apparatus for rolling spikes, nails, bolts, or other similar articles from rods, sheets or bars of iron or other metal or malleable substances, and in preparing, shaping, slitting and manufacturing same, and for the construction of furnaces for heating iron or for other similar purposes.	840	22nd March 1867	Samuel Sedgwick.
Machinery for seeding, breaking, drying, washing, bleaching, softening, combing, brushing and hackling flax, hemp, jute, China grass, New Zealand flax, Esparto and other fibres, for spinning and paper stuff. (*heating drying chambers.*)	841	22nd March 1867	John Spencer.
Hot air stoves for blast furnaces - - -	893	27th March 1867	Richard Howson.
An improved apparatus for concentrating the extracts of bark for tanning and other purposes. (*Communicated by Benjamin Irving.*)	919	28th March 1867	William Robert Lake.
Heating water for feeding the boilers of condensing steam-engines.	925	29th March 1867	Kenyon Barnes.
Improvements in utilizing the heating properties of petroleum and other liquid hydrocarbons and oils, and in apparatus employed therefor -	930	29th March 1867	Arthur Barff. Joshua Kidd.
Improvements in gas fire-places and gas stoves, and in apparatus for heating conservatories and other rooms.	936	29th March 1867	Edwin William Ball.
Apparatus for the manufacture of bricks, tiles and other articles of plastic material. (*Communicated by Frederick Hertel.*)	954	30th March 1867	William Clark.
Apparatus employed for heating the feed water of steam-boilers - - - - - -	1003	3rd April 1867	William Stafford. William Porter McCallum.
Improvements in treating and softening jute, hemp, flax and other fibrous substances, and in the machinery or apparatus connected therewith.	1034	6th April 1867	William Parell Butchart.
Improvements in apparatus for applying concentrated heat, and suitable for lighting fires, brazing and similar uses.	1149	20th April 1867	John McKechnie.
Brewers' mash tuns - - - - (*attemperating.*) (*Communicated by James Walker.*)	1150	20th April 1867	John Millward.
Manufacture of paper and of the chemical matters employed therein - - - - (*Partly communicated by Ernest Pinchon.*)	1171	22nd April 1867	Charles Townsend Hook. Eustace Hook.
Improved means and apparatus for drying moist substances, or drying and burning granular substances, or evaporating liquid substances, and economizing the waste heat produced in the processes.	1195	25th April 1867	George Gordon.
Certain improvements in the method and apparatus for keeping warm glues, starches, gums and other liquids, which is also applicable for keeping other articles warm.	1208	26th April 1867	Tempest Booth.
Manufacture of alcohol and other spirits - - (*heating the wash.*)	1288	2nd May 1867	John Fletcher Collins.
Lamps and apparatus for facilitating the burning of petroleum, paraffin oil and other hydrocarbon fluids, for obtaining light and heat - -	1315	4th May 1867	Peter Brash. William Young.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
HEATING, &c.—*continued.*			
An improved mode of and apparatus for burning hydro-carbon oils.	1329	6th May 1867	Thomas Crow.
Evaporators for concentrating saccharine fluids -	1416	13th May 1867	William Edmond de Bourran.
Improvements in marine and land boilers and their furnaces, and also other furnaces used for the manufacture of iron and other purposes.	1467	17th May 1867	Simon Regan.
An apparatus for transferring heat from one current of gas to another. (*Communicated by Monsieur Charles Fleurot.*)	1478	18th May 1867	Hector Auguste Dufrene.
Improvements in burning all hydro-carbon oils, such as creosote, petroleum, paraffin oil, shale oil, gas tar, and other similar products capable of being used as fuel. (*for warming pans.*)	1487	20th May 1867	Thomas Metcalf.
Boilers for boiling or steaming roots, and for heating water for other purposes - -	1497	20th May 1867	Valentine Barford. John Skerman.
Improvements in furnaces for heating the air stoves of blast furnaces and for other purposes, and in utilizing the products of combustion from such stoves.	1517	22nd May 1867	Daniel Adamson.
An improved feed water arrangement for the tenders or water tanks of locomotive engines. (*heating.*) (*Communicated by Charles Schau.*)	1539	23rd May 1867	Alfred Vincent Newton.
Drying peat and other materials - - - (*utilising waste furnace heat.*)	1595	29th May 1867	William Barry Ritchie. Jacob Geoghegan Willans.
A new means for procuring the more perfect combustion in the burning of fuel. (*utilising waste heat.*)	1610	30th May 1867	Tony Petitjean.
Improvements in steam-boilers and in evaporating pans.	1629	1st June 1867	Frederick Burnett Houghton.
Improvements in the construction of steam-boilers and in apparatus connected therewith. (*producing super-heated steam.*)	1637	3rd June 1867	Charles Louis Joseph Carville, senior.
Certain improvements in furnaces, and in apparatus to be employed in the construction of steam-boilers. (*heating ends of boiler tubes.*)	1650	5th June 1867	David Hanson.
Hot-water apparatus for heating and warming purposes.	1673	7th June 1867	Henry Crowe.
Construction of steam-boilers - - - (*obtaining increased heating surface.*)	1706	10th June 1867	Thomas Holt.
Improvements in machinery or apparatus for separating liquids or moisture from substances, and also for revivifying and cooling animal charcoal and other substances, and for treating sugar. (*heating and superheating solutions of sugar.*)	1707	10th June 1867	William Orr.
Construction of heating and annealing furnaces - (*Communicated by the Union Car Spring Manufacturing Company.*)	1784	18th June 1867	William Sparks Thomson.
Means or apparatus for the production of gas for illuminating and other uses, from hydrocarbons, which apparatus is also adapted to be used for culinary and other heating purposes - -	1849	25th June 1867	Adam Aitchison. Thomas South.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
HEATING, &c.—*continued.*			
Improved means of and apparatus for washing and drying moist substances, or drying and burning granular substances, or evaporating liquid substances, and for economizing the waste heat produced in such processes.	1930	2nd July 1867	George Gordon.
Apparatus for producing or increasing the light or heat from carbonized atmospheric air, gas or gaseous mixtures, by the use of hydrocarbons, oils, spirits or other inflammable liquids or any mixture thereof.	2045	12th July 1867	Frederick Wilkins.
Apparatus for the manufacture of artificial fuel, which apparatus may also be employed for other purposes.	2065	13th July 1867	Henry Fletcher.
Preservation of meat and animal substances -	2079	15th July 1867	Theophilus Redwood.
Improved means and apparatus for "malting" or drying barley, part of which means and apparatus is also applicable to other purposes - (*applicable to heating generally.*)	2095	17th July 1867	James Schofield. Joshua Caleb Dawson.
Improved means of heating the feed-water supplied to steam-boilers.	2107	18th July 1867	Thomas Dawson Walker.
Heating and cooking apparatus - - - (*Communicated by Oscar Fitzallan Morrill.*)	2110	18th July 1867	George Tomlinson Bousfield.
Pipes for ventilating, heating and vaporizing hothouses, malthouses and other buildings and residences.	2125	20th July 1867	William Taylor.
Improvements in the manufacture of gases for the production of light, heat and motive-power, and in apparatus for that purpose.	2180	27th July 1867	Paul Alexander Rohart.
Hot-blast stoves - - - - (*heating the air.*)	2182	27th July 1867	Humphrey Chamberlain.
Improvements in burning petroleum and other hydrocarbon liquids for the production of heat and light, and in the apparatus or means employed therein. (*Communicated by Simon Stevens.*)	2196	29th July 1867	Benjamin Franklin Stevens.
Kitchen ranges - - - -	2274	6th Aug. 1867	Moses Jones.
Apparatus for evaporating or recovering lees -	2327	13th Aug. 1867	Alexander Swan.
Means or apparatus for printing woven and other fabric or material.	2336	14th Aug. 1867	Charles Holliday.
Puddling and other furnaces employed for melting, boiling or heating iron - - -	2337	14th Aug. 1867	John Allcock Jones. Richard Howson. John Gjers.
Apparatus employed in the heating of bakers' ovens	2348	15th Aug. 1867	John Cosgrave.
Apparatus applicable to the heating of greenhouses, causing bottom heat to plants, and other heating purposes.	2361	17th Aug. 1867	James Wavish.
Uniting and treating iron, steel and other metals in sheets, plates, rails, bars, rods, links, bands, hoops, tubes or other formes, applicable to navigable vessels, forts, guns, bridges, roofs, floors, boilers, heaters, tanks, chests or like structures.	2376	19th Aug. 1867	William Bridges Adams.
Apparatus and means for burning combustible liquids, vapours and gases, to obtain heat and light therefrom - - - -	2414	22nd Aug. 1867	James Lee Norton. George Hawksley.
Method of warming carriages employed in the conveyance of passengers on railways - -	2415	23rd Aug. 1867	Ferdinand Ziffer. Walter Goodbrand.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
HEATING, &c.—*continued.*			
Apparatus for applying concentrated heat, and suitable for lighting fires, brazing and similar uses.	2491	3rd Sept. 1867	John McKechnie.
An apparatus for heating, boiling, agitating and raising size and other liquids.	2500	4th Sept. 1867	Hugh Gardiner Graham.
An improved fuel economizer - - - (*heating feed water.*)	2584	12th Sept. 1867	James Perrin.
Apparatus for heating, evaporating and cooling liquids.	2593	13th Sept. 1867	William Fothergill Batho.
A mode of increasing the efficiency of steam for motive-power purposes. (*super-heating steam.*) (*Communicated by John Blake Tarr.*)	2600	14th Sept. 1867	William Edward Newton.
Apparatus for distributing gas for heating and lighting.	2629	19th Sept. 1867	Richard Watson.
Improvements in the treatment and application of the residuum which results from the clarification and purification of cotton seed oil and other vegetable drying oils, and of the residuum which results from the distillation or other analogous treatment of the said material, for the manufacture and preparation of isolating preservative and anti-corrosive compositions.	2656	21st Sept. 1867	Giacomo Eduardo Marchisio.
Improvements in apparatus for regulating automatically the supply of gas, air and water, or any one or more of them, to steam-boilers heated by gas or otherwise, and for utilizing the heat of the gases produced or heated by combustion.	2674	23rd Sept. 1867	Charles Ritchie.
Production of light and heat for signalling and other purposes - - - -	2691	24th Sept. 1867	Philip Howard Colomb. Francis John Bolton.
A new or improved method and apparatus for converting the gaseous products of combustion into combustible gases. (*increasing temperature.*) (*Communicated by Nicolas Lebedeff.*)	2694	25th Sept. 1867	Charles Denton Abel.
Apparatus or arrangements for warming and ventilating buildings.	2701	25th Sept. 1867	William Woodcock.
Improved means of and apparatus for heating the water to be used in steam-boilers and in other vessels - - - - -	2773	2nd Oct. 1867	James Henry Nelson. Thomas Briggs.
Machinery for sewing boots and shoes - - (*thread heater.*) (*Communicated by Augustus Destouy and Frederic Renaud.*)	2779	2nd Oct. 1867	William Robert Lake.
Improvements in and applicable to ovens, boilers, and other apparatus in which heat is employed - (*Communicated by Alfred Charles Joly de Marval.*)	2780	3rd Oct. 1867	William Spence.
Improvements in heating blast for smelting and other furnaces, and in the apparatus or means connected therewith.	2781	3rd Oct. 1867	Robert Dick.
Improved methods of constructing steam generators for engines, new furnaces connected therewith, and the mode of working them, with machinery in combination with the uses to which they are applicable. (*regulators for super-heaters, heating carriages.*)	2792	4th Oct. 1867	Henry Pinkus.
Machinery for the manufacture of hats - -	2838	9th Oct. 1867	Henry Wallwork.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
HEATING, &c.—*continued.*			
Apparatus for warming and ventilating apartments or buildings.	2853	11th Oct. 1867	Richard George.
Method of and apparatus for heating - -	2862	11th Oct. 1867	Robert Alfred Wright.
Improvements in smoke-consuming apparatus for steam-boiler and other furnaces, and in machinery for manufacturing parts of the same. (*superheating steam.*)	2871	12th Oct. 1867	Jean Baptiste Pierre Alfred Thierry.
Apparatus for superheating steam and other vapours. (*Communicated by Leffert Ryerson Cornell.*)	2890	15th Oct. 1867	Henri Adrien Bonneville.
Improvements in the treatment of hydrocarbons for the production of gas sufficiently permanent to be stored for lighting and heating purposes, and especially in the treatment of the hydrocarbons and other products obtained by distilling or carbonizing coal, wood and other carbonaceous materials, including those obtained in the manufacture of gas and in the distillation of coal tar.	2893	15th Oct. 1867	Adam Aitchison.
Improvements in treating sewage or other liquid matters so as to purify the more fluid portions thereof, and recover some of the contained matters for re-use in manufacturing processes, and in the preparation of others for use as manures - - - - - (*obtaining gas for heating.*)	2894	15th Oct. 1867	Thomas Henry Baker. Thomas Woodroffe.
Steam-boilers and furnaces - - -	2920	17th Oct. 1867	William Tredgold. James McNeil.
Manufacture of pressed leather - - -	2977	23rd Oct. 1867	Frederick John Bugg.
Improved modes of and means for curing, drying, preserving and packing meat, fruit, vegetables and other perishable substances. (*warming packing houses.*) (*Communicated by Daniel E. Somes.*)	3006	25th Oct. 1867	William Robert Lake.
Improvements in the mode of and apparatus for burning the gases arising from the distillation of liquid hydrocarbons, and also in economizing fuel by the said process - - -	3014	26th Oct. 1867	George Dorsett. Edward Dorsett. John Bennington Blythe.
Evaporators for concentrating saccharine fluids -	3031	28th Oct. 1867	William Edmond de Bourran.
An improved portable distilling apparatus for producing fresh aërated water from sea water, part of which said apparatus is also applicable to the burning of hydrocarbon oils for other purposes. (*heating steam-boilers.*)	3072	31st Oct. 1867	Alexander Chaplin.
Apparatus for distilling, heating, evaporating and cooling liquids.	3148	7th Nov. 1867	John Frederick Brinjes.
Warming, ventilating and heating apparatus -	3155	8th Nov. 1867	Joseph Wontner Smith. Tony Petitjean.
Apparatus for burning mineral oils or other hydrocarbons, to obtain heat therefrom.	3176	9th Nov. 1867	William Lawrie.
Furnaces or heating apparatus - - - (*Communicated by Eugene Alexandre Frederic Goguel.*)	3200	12th Nov. 1867	Clinton Edgcumbe Brooman.
Tubular boilers - - - - - (*Communicated by Louis Barret.*)	3212	13th Nov. 1867	Alexander Melville Clark.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
HEATING, &c.—*continued.*			
Improvements in the manufacture of fire-lighters, applicable also for temporary fires or heaters, and in the means or apparatus employed therein.	3244	15th Nov. 1867	James Templeman.
An improved gas furnace - - - (*heating gas and air.*)	3245	15th Nov. 1867	Richard Howson.
An improved system or mode of ornamenting paper hangings, and machinery and apparatus therefor. (*heating apparatus.*)	3259	16th Nov. 1867	William Bailey.
A new or improved process of and apparatus or furnaces for the manufacture of metal direct from the ore. (*Communicated by Pierre Emile Martin.*)	3264	18th Nov. 1867	Clinton Edgcumbe Brooman.
Improvements in evaporating apparatus and in utilizing the steam derivable from such apparatus. (*and concentrating solutions.*)	3277	19th Nov. 1867	William Anderson.
Method of and apparatus for warming and heating solid and liquid food for children and invalids.	3310	22nd Nov. 1867	Thomas George Fonnereau Dolby.
Improvements in the manufacture of gas, and in the treatment and application of such and other gases for cooking, warming, lighting, generating of steam and other purposes, combined with their use as a motive-power previous to being burned or consumed, and improvements in the apparatus for these purposes.	3318	23rd Nov. 1867	Peter Salmon.
Steam generators - - - - - (*heating feed water, superheating steam.*) (*Communicated by Pierre Joseph Guyot.*)	3321	23rd Nov. 1867	Clinton Edgcumbe Brooman.
Improvements in preserving meat and in apparatus employed therein. (*applying heat to the separator.*) (*Communicated by Thomas Sutcliffe Mort.*)	3323	23rd Nov. 1867	William Mort.
Boilers for heating water to supply pipes, tubes or other apparatus for warming buildings.	3413	2nd Dec. 1867	John Clowes Woolfield.
Certain improvements in the manufacture of waterproof or liquid-proof paper or glazed paper or fabrics. (*for preventing evaporation.*)	3437	3rd Dec. 1867	John Thorpe.
Portable and other steam-engines and boilers - (*feed water heater.*)	3439	3rd Dec. 1867	William Brown. Charles Neale May.
An improved lighting, heating and cooking apparatus, part of which is applicable to other purposes. (*Communicated by Zoeth Durfee.*)	3451	4th Dec. 1867	Edward Thomas Hughes.
Apparatus for warming buildings in which high pressure steam-engines are employed.	3457	4th Dec. 1867	William Anthony Herring.
Engines worked by heated air or gas - -	3466	5th Dec. 1867	Arthur Charles Sterry.
Improvements in furnaces and in effecting the combustion of fuel therein. (*for evaporating liquids.*)	3468	5th Dec. 1867	Thomas Joseph Leigh.
Machinery and apparatus for heating and forming metals for railway wheel tyres.	3482	7th Dec. 1867	Paul Rapsey Hodge.
Certain improvements in the method of heating buildings and in the apparatus connected therewith.	3487	7th Dec. 1867	John Partington.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
HEATING, &c.—*continued.*			
Apparatus for heating and agitating liquid or fluid substances.	3678	27th Dec. 1867	David Steele.
Improvements in warming, ventilating and heating apartments or buildings, and in the arrangement of apparatus connected therewith.	3682	27th Dec. 1867	John William Lewis.
An improved gas-burner - - - - (*Communicated by Willis Churchill.*)	3696	28th Dec. 1867	Charles Churchill.
Improvements in the process of and apparatus for producing heat by the combustion of fuel, for metallurgical and other operations where heat is required, and in the means for utilizing the waste heat from blast furnaces.	3698	30th Dec. 1867	Richard Fothergill.
Mode of and apparatus for combining the vapours of liquid hydrocarbons with oxygen and hydrogen, and burning the mixture as fuel. (*for heating.*) (*Communicated by David Oliver Macomber.*)	3706	31st Dec. 1867	Marc Antoine François Mennons.
An improved mode of and apparatus for evaporating liquids with a view to obtaining the saccharine, saline or other substances contained therein, in a dry or crystalline state.	3721	31st Dec. 1867	Robert Tooth.
See also "FIREPLACES." „ „ "FURNACES."			

HOISTS, CRANES, CAPSTANS, WINDLASSES; RAISING, LOWERING AND MOVING HEAVY BODIES; RAISING FROM MINES; RAISING SUNKEN SHIPS.			
Improved apparatus for regulating, controlling and for varying the speed of shafts and machinery. (*hoisting machinery.*)	51	8th Jan. 1867	Robert Robinson.
Shot or ammunition lifters or holders and carriages for the same.	85	12th Jan. 1867	Henry Duncan Preston Cunningham.
An improved carriage lifting jack - - - (*Communicated by Noel Victor Dominiques Barbou.*)	94	14th Jan. 1867	Alexander Horace Brandon.
Certain novel and improved combinations and arrangements of differential wheel gearing, and its application to various purposes - - (*for crabs, hoists, cranes and capstans.*)	125	18th Jan. 1867	Charles Frederick Cooke. John Standfield.
An improved apparatus for raising and lowering heavy bodies.	159	22nd Jan. 1867	Jean Chrétien.
Steam cranes - - - - -	277	1st Feb. 1867	George Russell.
Breaks and apparatus for giving motion to machinery. (*working windlasses.*)	299	2nd Feb. 1867	Robert David Napier.
Improvements in or applicable to hoists or sack-tackles - - - - - -	310	4th Feb. 1867	William Dewhirst. Joseph Dewhirst. Thomas Dewhirst.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
Hoists, &c.—*continued.*			
Machinery and apparatus for supporting, moving and forging heavy masses of metal.	342	7th Feb. 1867	John Ramsbottom.
Certain improvements in machinery or apparatus for pressing and shaping hats, bonnets or coverings for the head, made from straw or other materials. (*lifting and lowering dome cover.*)	345	7th Feb. 1867	Samuel Howard.
An improved safety apparatus for raising and lowering heavy bodies.	389	12th Feb. 1867	Eugene Henri Bernier.
Improvements in opening, closing and securing windows, doors and shutters, which improvements are also applicable to the opening, closing and securing the port holes of ships, and in the machinery or apparatus employed therein.	432	16th Feb. 1867	James Carter.
Apparatus for raising stranded and sunken vessels	441	18th Feb. 1867	Count Arthur Dillon.
Construction of windlasses - - -	442	18th Feb. 1867	William Horatio Harfield.
Improvements in the tackle for and in the manner of letting down and weighing anchors on shipboard.	723	13th March 1867	Frederick Robert Augustus Glover.
An improved cramping and lifting apparatus - (*Communicated by Henry Hitchings Baragwanath.*)	742	14th March 1867	John Phillips Baragwanath.
Improved safety apparatus for mining cages, hoists and lifts.	754	15th March 1867	John Povey Harper.
Improvements in machinery or apparatus for raising, lowering and moving heavy bodies, which improvements are also applicable for operating punching machines, screw presses, and the feed motion of circular and other saws and wood planing machines.	822	21st March 1867	James Alfred Limbert.
Cranes - - - - -	844	23rd March 1867	Robert Duncan.
Apparatus for raising weights and other appliances	990	3rd April 1867	Jonathan Pickering.
Improvements in apparatus to be used for towing ships or vessels, and in apparatus for laying submarine telegraph cables. (*or raising sunken ships.*)	1015	4th April 1867	James Maze Kilner.
An improved lifting machine applicable as a fire-escape and for repairing and decorating houses and other buildings.	1025	5th April 1867	Edward Beningfield.
An improved mode of and apparatus for multiplying power, more especially applicable to hoisting or lifting machinery. (*Communicated by Henry Josiah Griswold.*)	1077	11th April 1867	William Robert Lake.
An improved self-acting tackle hook - - (*for supporting and transporting heavy weights.*) (*Communicated by Charles Luxton.*)	1202	25th April 1867	Alexander Melville Clark.
Hoists suitable for raising and lowering weights -	1226	27th April 1867	Walter Crooke. Thomas Wrightson.
Improvements in locomotive and traction engines, applicable also to the raising of heavy bodies. (*Communicated by Theodore Krausch.*)	1285	2nd May 1867	John Henry Johnson.
Friction coupling breaks applicable to hoisting apparatus and other purposes.	1373	9th May 1867	Thomas Aldridge Weston.
Windlasses - - - - -	1428	14th May 1867	Edmund Walker.
Apparatus for raising or moving heavy weights -	1436	15th May 1867	William Clarke. Edmund Walker.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
Hoists, &c.—*continued.*			
Raising and lowering revolving shutters - -	1480	18th May 1867	John Smith. John Lawson Ibbotson.
Raising sunken vessels - - - - (*Communicated by Samuel William Maquay.*)	1489	20th May 1867	Thomas McComas.
Improvements in the construction of a steam vessel suitable for ferrying laden trains across the ocean complete, together with its landing-places, breakwaters, and modes of protection from marine insects and fouling, which improvements are also generally applicable to other vessels, and to the protection of iron and wood exposed to the action of the sea water. (*hydraulic lifts.*)	1503	21st May 1867	Edward Henry Cradock Monckton.
Means of and apparatus for landing, trans-shipping or discharging grain and other substances in or from ships, vessels, granaries or warehouses, and for taking or drawing samples of grain from granaries.	1540	23rd May 1867	Louis Stuckenshmidt.
An improved mode of and means for communicating motion to cranes, and regulating and controlling the operation of the same.	1680	7th June 1867	Alfred Barry.
Apparatus for elevating or moving grain, and for weighing and moving grain. (*see* "Thrashing.")	1717	11th June 1867	Stephen Wells Wood.
Drilling machines and hoisting machines - -	1753	15th June 1867	George Allix.
Machinery or apparatus for lifting, lowering and transporting heavy bodies.	1760	17th June 1867	John Meiklejon.
An improved mechanical arrangement for preventing over-winding in shafts of coal and other mines. (*or hoists.*)	1777	18th June 1867	William Fairley.
Improved means and apparatus for raising sunken vessels, which invention is also applicable for preventing vessels from foundering.	1778	18th June 1867	Joseph Marshall Frost.
Lifts or cages and tubs for raising minerals from pits or mines and for other like purposes.	1781	18th June 1867	Job Edwards.
Improvements applicable to apparatus for raising and lowering weights, for indicating and registering the amount lifted, or for indicating only the said weight - - - - -	1816	21st June 1867	Follett Charles Hennett. Daniel Spink.
An improved apparatus to be employed in moving from place to place, laying down and jointing metal pipes - - - - -	1834	24th June 1867	Thomas Rafferty. John Henry Storey.
Apparatus for hoisting building materials - -	1855	25th June 1867	William Cooke.
Apparatus for raising and lowering heavy bodies - (*Communicated by Louis Vernay and Paul Lesourd.*)	1965	4th July 1867	Michael Henry.
An improved self-acting buckle or coupling to be employed for lifting, hoisting or winding at coal pits or for other similar purposes - -	2025	10th July 1867	William Heyes. William Bevan.
Improvements in safety apparatus for raising and lowering persons and weights in mines, applicable to other purposes.	2044	12th July 1867	Eugéne Henri Bernier.
Certain improvements in "pulley and chain" gearing to be employed for lifting or traction purposes, for moving fire bars in furnaces, or for driving mechanism.	2073	15th July 1867	Thomas Wrigley.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
Hoists, &c.—*continued.*			
Improved apparatus for the prevention of over-winding and falling of the cages used in mine shafts, lifts and hoists.	2144	23rd July 1867	John Marley.
Cranes and apparatus for raising, hauling and lowering weights.	2193	29th July 1867	Percy Graham Buchanan Westmacott.
Apparatus for hauling vessels or other heavy bodies into deep water.	2204	30th July 1867	Andrew Murray.
Improvements in hydraulic lifts and in the mode of operating the same. (*Communicated by Adolphe Le Bœuf.*)	2236	2nd Aug. 1867	John Henry Johnson.
Improved gear for actuating screw and other like propellors of navigable vessels, by manual, animal or motive-power engine, and for elevating, lowering, connecting or disconnecting such propellors.	2322	13th Aug. 1867	John James Bright.
Certain improvements in safety apparatus to be employed for preventing accidents in winding coals and other minerals from mines.	2350	15th Aug. 1867	Edward Ormerod.
Means of and apparatus for the preservation of life from fire, and for raising or lowering persons or goods from buildings.	2385	20th Aug. 1867	Walter Dixon.
Signalling and indicating apparatus - - (*applicable to mining engines.*)	2468	29th Aug. 1867	Arthur McNutt Wier. Marshall Arthur Wier.
Machinery or apparatus for lifting, lowering and transporting heavy bodies.	2663	21st Sept. 1867	John Meiklejon.
Apparatus for hauling or winding ropes - -	2759	1st Oct. 1867	James Grafton Jones.
An improved lifting machine applicable as a fire-escape, and for repairing and decorating houses and other buildings.	2824	8th Oct. 1867	Edward Beningfield.
Machinery or apparatus applicable to cages or hoists used in mining or lifting machines.	2934	18th Oct. 1867	John King.
A telescopic apparatus applicable as a temporary or stationary observatory for temporary bridges, building and other purposes. (*raising materials.*)	2969	22nd Oct. 1867	William Beale.
Improvements in transmitting motive-power and in mechanism or apparatus employed therefor. (*actuating capstans, cranes, &c.*)	3066	31st Oct. 1867	James Tennant Caird.
Improvements in apparatus for rendering innocuous the momentum of heavy bodies so as to prevent injury and damage from concussion, applicable to ships' cables, cranes, windlasses, capstans, hoists, lifts, weighing machines, ship and fort armour, to training guns, to railway trains, station buffers, fenders to pier-heads, gangways, breakwaters and other similar structures, which apparatus is also applicable for storing and accumulating power, which may be used for throwing projectiles, raising or moving heavy weights, such as ships, stranded or sunken vessels, propelling carriages and other purposes.	3302	21st Nov. 1867	William Graham McIvor.
An improved brake-washer - - - (*for loading cranes.*) (*Communicated by Arthur Dillon-Corneck.*)	3399	30th Nov. 1867	William Edward Gedge.
Improvements in steam winches, which are also applicable to other similar purposes. (*Communicated by Joseph Corradi.*)	3425	2nd Dec. 1867	George Breen.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
Hoists, &c.—*continued.*			
Apparatus for driving straw elevators - -	3477	6th Dec. 1867	Francis Roper.
Capstans - - - - - -	3595	18th Dec. 1867	John Patterson.
Improvements in breaks for railway and other carriages, and in signalling and other apparatus in connection therewith, which improvements are also partly applicable to other purposes. (*to windlasses.*)	3597	18th Dec. 1867	Thomas Comfield the younger.
Improvements in means or apparatus for propelling canal boats and other vessels, parts of which improvements are applicable to other purposes. (*windlass and rope.*) (*Communicated by Baron Oscar de Mesnil and Max Eyth.*)	3604	18th Dec. 1867	Hunter Henry Murdoch.
Improvements applicable to the rigging, chains, windlasses, anchors and other parts of ships or vessels, or to collieries, railways, rolling stock or other purposes, to prevent sudden blows, jerks or strains.	3637	21st Dec. 1867	James Davison.
An elastic coupling for the prevention of sudden or undue strains upon ropes or chains when used in towing, hauling or lifting. - -	3641	23rd Dec. 1867	William Dixon. William Brown.
An improved mode of and means for raising sunken vessels.	3697	30th Dec. 1867	John Emery Gowen.
Horse-shoes, Shoeing Horses.			
A new horse-shoe cushion - - - -	154	21st Jan. 1867	John Edwards.
Improved appliances for horse-shoes as a substitute for "roughing." (*Communicated by Frederich Dominick.*)	225	28th Jan. 1867	Charles Denton Abel.
An improvement in horse-shoes by constructing the shoes in such manner as that the horse can immediately be roughed by the person using it, without the shoes being removed from the feet of the horse, and without the necessity of having recourse to any smith or farrier for that purpose, and that even while the horse is in actual use on the road or otherwise.	318	5th Feb. 1867	Stephen Lancaster Lucena.
Construction of shoes for horses - - -	381	11th Feb. 1867	Robert Bouverie Mulliner.
An improved covering or cushion for horses' feet - (*Communicated by Samuel Adlam, junr.*)	533	27th Feb. 1867	George Haseltine.
Construction and adjustment of horse-shoes -	695	11th March 1867	William Akers.
Shoes for horses and cattle - - - (*Communicated by Henry Franklin Shearman and Thomas O'Leary.*)	1119	15th April 1867	William Robert Lake.
Roughing horses and other animals - - -	1699	10th June 1867	William French.
Improved appliances for horse-shoes as a substitute for "roughing." (*Communicated by Frederich Dominick.*)	1724	12th June 1867	Charles Denton Abel.
Apparatus for measuring horses' feet and for adapting and fitting shoes thereto. (*Communicated by Auguste Clément.*)	1815	21st June 1867	Alexander Melville Clark.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
HORSE-SHOES, &c.—*continued.*			
Improvements in the manufacture of horse-nails and other nails, and in machinery used therein -	2733	27th Sept. 1867	John Huggett. John Albert Huggett.
An improved mode of preparing iron for the manufacture of various articles where great strength and capability of resistance to tensile strain or torsion is required. (*for horse-shoes.*) (*Communicated by Michel Pawlowitch Lwoff.*)	2865	11th Oct. 1867	William Edward Newton.
Shoes for horses and other animals - - -	2965	22nd Oct. 1867	Peter Walker. Andrew Walker.
Shape and manufacture of horses' shoes -	3368	28th Nov. 1867	William Palmer.
Improvements in horse-shoes and in the method of fixing or attaching the same to horses' hoofs.	3422	2nd Dec. 1867	George Philcox.
HORTICULTURE, CONSERVATORIES, LAWN MOWING, TRAINING PLANTS.			
Apparatus for training hops - - - - -	203	25th Jan. 1867	Horace Boys.
Horticultural buildings or glazed structures for horticultural and other purposes.	294	2nd Feb. 1867	William Richardson.
An improved compound for destroying insects and preventing and checking blight in plants.	605	4th March 1867	Samuel Newington.
Construction of posts, poles and similar supports for telegraphic, agricultural or other purposes. (*hop poles.*) (*Communicated by Guillaume Lichtenfelder.*)	887	26th March 1867	Charles Emile Sohn.
Improvements in gas fire-places and gas stoves, and in apparatus for heating conservatories and other rooms.	936	29th March 1867	Edwin William Ball.
Construction of movable palisades for parks, gardens and enclosures, the said invention being also applicable to training espaliers, vines and shrubs.	1257	1st May 1867	Antoine Louet.
Buildings and structures to be employed for horticultural uses.	1268	1st May 1867	Samuel Newington.
A new or improved combined apparatus for sowing seeds, hoeing, raking and other horticultural purposes.	1452	16th May 1867	James Griffiths.
Improvements in apparatus and in the means employed for subduing and extinguishing fires, partly applicable to other useful purposes. (*watering gardens.*)	1614	31st May 1867	John Scott.
Construction of hand garden engines and hydropults.	1640	3rd June 1867	Robert William Page.
A new oil or gas stove - - - - - (*for conservatories, &c.*)	1653	5th June 1867	Thomas Harvey Saunders.
Mode of training hop and grape vines and other climbing plants. (*Communicated by Levi Hubbard Whitney.*)	1991	8th July 1867	John Garrett Tongue.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
HORTICULTURE, &c.—*continued.*			
Pipes for ventilating, heating and vaporizing hot-houses, malthouses and other buildings and residences.	2125	20th July 1867	William Taylor.
Construction of the roofs of horticultural and other buildings and structures - -	2150	24th July 1867	William Simpson. William Howitt.
Apparatus applicable to the heating of green-houses causing bottom heat to plants, and other heating purposes.	2361	17th Aug. 1867	James Wavish.
A new or improved cucumber box - - -	2567	10th Sept. 1867	John Pottle.
Portable fountains - - - -	2864	11th Oct. 1867	George Angell.
Construction of hand garden engines and hydropults.	3423	2nd Dec. 1867	Robert William Page.
An improved lighting, heating and cooking apparatus, part of which is applicable to other purposes. (*warming greenhouses.*) (*Communicated by Zoeth Durfee.*)	3451	4th Dec. 1867	Edward Thomas Hughes.
Improvements in apparatus for training or growing hops and other plants, which improvements may also be applied to line-posts and other posts or supports for various purposes - -	3509	10th Dec. 1867	John Grout. Edwin Mathews.
INKS AND INKSTANDS.			
Manufactare and preparation of dry tinctorial compounds capable of easy solution in water. (*writing fluids, marking liquids.*)	106	15th Jan. 1867	Arnold James Cooley.
Manufacture of envelope cases, blotting books and other articles, commonly called "writing" or library sets, and other similar articles. (*inkstands.*)	305	4th Feb. 1867	George William Betjemann.
Inkstands - - - - (*Communicated by George Marie Stoltz, jun^{r}.*)	557	28th Feb. 1867	John Piddington.
Lithographic stone grinding, graining, polishing and ink and colour grinding apparatus.	775	18th March 1867	Thomas William Nicholson.
Inkstands - - - -	1669	7th June 1867	Charles Emile Giojola. James Hopffe Gray. Philip Martinengo.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
INSECTS AND VERMIN (*destroying*).			
Vermin and other traps - - -	204	26th Jan. 1867	Francis Stephens.
An improved compound for destroying insects and preventing and checking blight in plants.	605	4th March 1867	Samuel Newington.
Vermin traps - - - - (*Communicated by Henri Ferdinand Serrin.*)	1080	11th April 1867	William Clark.
Rabbit and vermin traps - - -	3435	3rd Dec. 1867	William Shave.
JEWELLERY, LOCKETS, BROOCHES, BRACELETS, WATCH CHAINS, SWIVELS AND KEYS.			
Watch keys and other keys - - -	238	29th Jan. 1867	John Ritchie.
Manufacture of envelope cases, blotting books and other articles, commonly called "writing" or "library sets," and other similar articles. (*caskets.*)	305	4th Feb. 1867	George William Betjemann.
An improved process of preparing raw hide for the manufacture of various articles. (*articles of jewellery.*)	394	12th Feb. 1867	William Henry Towers.
An improved holder for railway and other tickets, part of which improved holder is applicable to other purposes. (*holding brooches, &c.*) (*Communicated by Monsieur Charles Cotte.*)	412	14th Feb. 1867	Hector Auguste Dufrené.
Manufacture of chains and fastenings - -	528	26th Feb. 1867	John George Taylor.
A new and useful process whereby leather, wholly or partially tanned, or animal tissue of any nature, is made hard, semi-elastic and transparent. (*for making articles of jewellery.*)	651	7th March 1867	William Henry Towers.
Improvements in mourning and other lockets, which improvements may also be applied to other dress ornaments.	665	8th March 1867	Thomas Smart Turnbull.
Brooch and other fastenings - - -	685	11th March 1867	Joseph Josiah Blackham.
Apparatus for protecting watches in the pocket -	808	20th March 1867	Benjamin Jackson Smith.
Decoration or ornamentation of metals - - (*brooches, bracelets, &c.*) (*Communicated by Charles Besançon.*)	932	29th March 1867	George Davies.
Ratchet levers for actuating drills, screw drivers, watch keys and other like instruments.	1360	8th May 1867	Thomas Aldridge Weston.
Manufacture of earrings - - -	1601	29th May 1867	Henry Oakes.
Spring hooks - - - - - (*swivel for watch chains.*) (*Partly communicated by Samuel Lagwitz.*)	1657	5th June 1867	Isaac Evans.
Fastenings for brooches - - -	1703	10th June 1867	John Hampden Kerly.
Manufacture of chains, bracelets, necklaces and other similar articles of jewelry.	1731	13th June 1867	Auguste Cahen Lion.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
JEWELLERY, &C.—*continued.*			
Improvements in watch cases, which improvements are also applicable to locket and miniature cases. (*Communicated by William Henry Halsey.*)	2252	3rd Aug. 1867	James Thomas Hatfield.
Manufacture of articles of jewellery - -	2594	13th Sept. 1867	Richard Lowe. John Taylor.
An improved method of and apparatus for attaching and securing watch chains and similar articles to vests and other garments - -	2751	30th Sept. 1867	William James. William Hill.
Manufacture of ornaments for dresses and decorative purposes.	2950	19th Oct. 1867	Hesketh Hughes.
Manufacture of hollow metallic seamless spheres and ornaments - - - - (*for jewellery.*)	3479	6th Dec. 1867	Richard Jones. John Abrahall.
Treatment of paper and certain woven fabrics for rendering them ornamental and durable as articles of dress, and for decorative and ornamental purposes. (*cases for jewellery.*)	3535	12th Dec. 1867	Edward Reed Sintzenich.
JOINING, JOINTING, COUPLING; PIPE JOINTS, RAILWAY JOINTS, FURNITURE JOINTS AND HINGES; PACKING FOR JOINTS.			
Certain improvements in the manufacture of carriages, coaches and other vehicles. (*hinges.*)	17	3rd Jan. 1867	Joseph Cockshoot, jun^{r}.
Apparatus employed in coupling railway carriages to each other.	18	3rd Jan. 1867	William Chippendale.
Tubular steam-boilers - - - - (*joints for transverse tubes.*)	76	11th Jan. 1867	James Howard. Edward Tenney Bousfield
Packing bales and boxes of goods - - (*joints for packing boxes.*)	200	25th Jan. 1867	James Clark.
Improvements in lighting railway carriages with gas and in the apparatus employed therein.	230	29th Jan. 1867	François Constant Cambrelin.
Manufacture of leather straps and driving bands -	357	8th Feb. 1867	Michael John Haines.
Machinery for manufacturing the junctions of gas, water, steam and other pipes.	365	8th Feb. 1867	William Jones.
Uniting iron and steel in sheets, plates, rails, bars, rods, links, bands, hoops, tubes or other forms, applicable to navigable vessels, forts, bridges, roofs, floors, tanks or chests.	469	21st Feb. 1867	William Bridges Adams.
Improved apparatus for fastening or connecting the wires employed for transmitting electric signals on railway trains.	488	22nd Feb. 1867	Alice Isabel Lucan Gordon.
Fastenings for driving and other belts or bands - (*Communicated by John Ashton Greene.*)	530	26th Feb. 1867	Alfred Vincent Newton.
Manufacture of packing for the joints of steam-engines, pumps and for other purposes. (*Communicated by Morris Botticher.*)	613	5th March 1867	George Haseltine.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
JOINING, &c.—*continued.*			
Couplings for baling bands - - - (*Communicated by George Newton Beard.*)	630	6th March 1867	Alfred Vincent Newton.
Brooch and other fastenings - - -	685	11th March 1867	Joseph Josiah Blackham.
Connecting door and other knobs to their spindles -	691	11th March 1867	Joseph Beverley Fenby.
Connecting the ends of pipes and tubes - -	753	15th March 1867	Nathan Thompson.
An improved belt hook or fastener for piecing driving and other belts or bands. (*Communicated by Frederick Greenleaf Wilson.*)	760	16th March 1867	William Randal Harris.
Improvements in cultivating land and in apparatus employed therein.	862	25th March 1867	Robert Higgins.
An improved process for uniting cork or leather either separately or combined.	878	26th March 1867	Joseph Toussaint.
An improved mode of and apparatus for rowing boats on water. (*jointed oars.*)	943	30th March 1867	Edward Stewart Jones.
An improved mode of coupling telegraph and other wires. (*Communicated by David McComb.*)	951	30th March 1867	James Jennings McComb.
An improved system of tank locomotive engine - (*connecting bogie carriages.*)	977	2nd April 1867	Jean Jacques Meyer. Adolphe Meyer, jun^{r}.
An improved machine for cutting scale-board, and for the manufacture of the scale-board or material cut by said machine into an improved fabric for structures generally. (*cementing cross grained.*) (*Communicated by John Kinney Mayo.*)	1051	8th April 1867	William Clark.
Apparatus for coupling railway carriages and vehicles - - - - -	1110	13th April 1867	John Richardson. Charles Greenwood.
Means of locking screw nuts - - - (*Communicated by Charles Bouchacourt.*)	1292	3rd May 1867	Alexander Melville Clark.
Binders for papers and the like, which allow the whole or parts of the contents to be removed or exchanged. (*hinged joint.*)	1313	4th May 1867	Noah Mendal Shafer.
An improved system of tenders for locomotives - (*construction of coupling rods.*)	1347	7th May 1867	George Krauss.
Locks and catches or staples connected therewith -	1353	7th May 1867	Henry John Saxby.
Certain improvements in the means of casting or producing parts of steam, gas and water fittings, as also parts of lamps and other articles. (*joints.*)	1355	8th May 1867	Charles Layton.
Friction coupling breaks applicable to hoisting apparatus and other purposes.	1373	9th May 1867	Thomas Aldridge Weston.
An improved mode of lubricating the stuffing boxes of steam-engines and pumps, and of rendering the packing for such or other machines or apparatus waterproof and more durable than heretofore. (*Communicated by Abraham Littlewood, Francis W. Bloodgood and Henry Dirks Ostermoor.*)	1378	9th May 1867	William Edward Newton.
Construction of the standards and other parts of scales and beams for weighing purposes, and for the mode of connecting the same.	1397	11th May 1867	John Walker.
Improvements in wheeled carriages and in the construction of wheels and springs for such carriages and other vehicles - - -	1441	15th May 1867	George Coles. James Archibald Jaques. John Americus Fanshawe.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
JOINING, &c.—*continued.*			
Apparatus for coupling pipes - - - - (*Communicated by John Baptist Mette, junior, and Julius Bigot-Renaux.*)	1560	27th May 1867	Henry Bernoulli Barlow.
Artificial limbs - - - - - (*knee joints.*) (*Communicated by Amasa A. Marks.*)	1663	6th June 1867	Thomas Brown.
Improvements in unions or apparatus for connecting together pipes or tubes, and for stopping the ends thereof.	1694	8th June 1867	Nathan Thompson.
An improved method of securing the nuts of bolts - (*used in jointing rails.*)	1780	18th June 1867	Rudolph Bodmer.
Construction of camp or folding bedsteads - (*folding joints.*) (*Communicated by Robert Clegg.*)	1811	21st June 1867	Benjamin Browne.
Construction of folding bedsteads and couches -	1812	21st June 1867	James Gardner.
An improved apparatus to be employed in moving from place to place, laying down and jointing metal pipes - - - - -	1834	24th June 1867	Thomas Rafferty. John Henry Storey.
An improved self-detaching coupling for railway carriages. (*Communicated by Ernest Von Jeinsen.*)	1879	27th June 1867	William Robert Lake.
Improvements in blankets used in machines for printing textile fabrics, and in the mode of joining together the ends of double-woven fabrics. (*Communicated by Seth William Baker.*)	1889	28th June 1867	Edward Joseph Hughes.
Machines for manufacturing circular cutters and milling tools. (*universal joint.*)	1956	4th July 1867	Paul François Tranchat.
Improvements in breech-loading fire-arms and in cartridges and projectiles, a part of which improvements is also applicable for converting muzzle-loading fire-arms into breech-loading fire-arms. (*slotted joint.*)	1971	5th July 1867	James MacNaughton.
Machinery for manufacturing metal tubes - - (*Communicated by Charles Granville Smith.*)	1973	5th July 1867	William Robert Lake.
Unions or apparatus for connecting together pipes or tubes, and for stopping the ends thereof.	1987	6th July 1867	Nathan Thompson.
An improved self-acting buckle or coupling to be employed for lifting, hoisting or winding at coal pits or for other similar purposes - -	2025	10th July 1867	William Heyes. William Bevan.
Construction of the permanent way of railways - (*Communicated by Gustave Natorp.*)	2038	11th July 1867	William Edward Newton.
Joints of pipes or tubes - - - - (*Communicated by Bernhard August Schäffer and Christian Friedrich Budenberg.*)	2124	20th July 1867	Arnold Budenberg.
Pipes for ventilating, heating and vaporizing hothouses, malthouses and other buildings and residences.	2125	20th July 1867	William Taylor.
Apparatus for facilitating communications between passengers, guards and drivers of railway trains	2156	25th July 1867	Samuel Turton. George Holcroft.
Construction of moveable joints for connecting metallic pipes and tubes.	2159	25th July 1867	Celi Timoleon Moulan.
Improvements in submarine telegraph cables and in the mode of joining the same.	2241	2nd Aug. 1867	Thomas Allan.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
JOINING, &c.—*continued.*			
Shackles or joining links - - - - -	2301	10th Aug. 1867	Edward Newby.
Improved gear for actuating screw and other like propellors of navigable vessels, by manual, animal or motive-power engine, and for elevating, lowering, connecting or disconnecting such propellors.	2322	13th Aug. 1867	John James Bright.
Uniting and treating iron, steel and other metals in sheets, plates, rails, bars, rods, links, bands, hoops, tubes or other formes, applicable to navigable vessels, forts, guns, bridges, roofs, floors, boilers, heaters, tanks, chests or like structures.	2376	19th Aug. 1867	William Bridges Adams.
Construction of steam-boilers and apparatus connected therewith.	2389	21st Aug. 1867	Joshua Murgatroyd.
Improved apparatus for cutting or forming metal joints.	2406	22nd Aug. 1867	William Newsome.
Brakes for railway trains, parts of which can be used or applied for signalling on trains in motion.	2483	2nd Sept. 1867	Richard Watson.
An improved yielding fish plate employed upon railways.	2558	10th Sept. 1867	Joseph Dicken.
Improvements in and applicable to slide valves - (*steam-tight joints.*)	2625	18th Sept. 1867	Thomas Adams. George John Parson.
Method of and materials for manufacturing ammunition boxes, pontoons, baggage and other waggons and carriages, and various equipments for military, naval and civil purposes. (*packing for joints.*)	2630	19th Sept. 1867	Thomas Charles Clarkson.
Improvements in the conduction or transmission of fluids, and in the means, apparatus or mechanism employed therefor - - -	2870	12th Oct. 1867	Robert Flamwell Baré. John Thomson.
Improvements in locomotive engines, vehicles and appendages thereto, for better and safer working on railways, tramways and common roads.	2907	17th Oct. 1867	William Bridges Adams.
Improvements in and in apparatus for the treatment and for the reception of urine and fœcal matter. (*making air-tight joints.*)	2998	24th Oct. 1867	Robert Weare.
Method of and apparatus for securing nuts and bolts employed on the permanent way of railways.	3054	30th Oct. 1867	John Maddocks.
Improvements in transmitting motive-power and in mechanism or apparatus employed therefor -	3066	31st Oct. 1867	James Tennant Caird. Stewart Robertson.
A new or improved frame or support for packing or carrying bottles in cases, together with a new or improved hinge for boxes and cases.	3085	2nd Nov. 1867	Alfred George Avenell.
Improved means of joining leather or other material in the constructing or repairing of straps or driving belts for machinery.	3097	4th Nov. 1867	William Dickinson.
Shaft couplings - - - - (*Communicated by Ebenezer Edwin Gilbert.*)	3159	8th Nov. 1867	William Inglis.
Certain improvements in the permanent way of railways.	3161	8th Nov. 1867	Thomas Wrigley.
Apparatus employed in coupling railway carriages -	3163	8th Nov. 1867	William Chippendale.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
JOINING, &c.—*continued.*			
Improvements in joining warp ends and in apparatus employed therein - - -	3177	9th Nov. 1867	John Howard Worthington Biggs. Arthur Worthington Biggs.
Instruments for joining blind cords and other cords.	3215	13th Nov. 1867	Ulysse Perrenoud-Würflein.
Improvements in means of communication applied to railway carriages, and in apparatus for making signals, which improvements are in part applicable to other purposes. (*connecting ends of cords.*)	3284	20th Nov. 1867	Hugh Hughes Lloyd.
Couplings for boring tools - - -	3285	20th Nov. 1867	Thomas Henry Tilley.
An improved spring hinge - - - (*Communicated by Jehiel Keeler Hoyt.*)	3364	27th Nov. 1867	William Robert Lake.
An improved sprinkler for powdered substances - (*jointing the valve stem.*) (*Communicated by George Jones.*)	3374	28th Nov. 1867	Edward Thomas Hughes.
Improved means of connecting and disconnecting locomotive engines and railway carriages and other vehicles. (*Communicated by Louis Joseph Lecocq.*)	3398	30th Nov. 1867	William Edward Gedge.
Couplings for railway wagons - - -	3407	30th Nov. 1867	Robert Fletcher Compton.
Apparatus to be used in joining warp ends, which apparatus may also be otherwise employed.	3426	2nd Dec. 1867	John Howard Worthington Biggs.
Construction of the permanent way of railways -	3433	3rd Dec. 1867	James Eckersley. David Martin.
Couplings for railway trucks - - -	3478	6th Dec. 1867	Jabez Evans.
Improvements in the construction of operating chairs more especially designed for dentists, parts of such improvements being applicable for other purposes.	3484	7th Dec. 1867	James Beall Morrison.
Joining horn and whalebone - - -	3619	19th Dec. 1867	Charles Beck.
Construction of and mode or modes of connecting and working railway carriages or trains - -	3629	21st Dec. 1867	Charles de Bergue. William Dredge.
Construction of camp or folding bedsteads - (*Communicated by Robert Clegg.*)	3631	21st Dec. 1867	Benjamin Browne.
Construction of miners' safety lamps - -	3640	23rd Dec. 1867	John Rowe.
An elastic coupling for the prevention of sudden or undue strains upon ropes or chains when used in towing, hauling or lifting - - -	3641	23rd Dec. 1867	William Dixon. William Brown.
Construction of couplings for driving belts -	3650	23rd Dec. 1867	William Henry Chase, junior.
Improvements in blankets used in machines for printing textile fabrics and in the mode of joining together the ends of double-woven fabrics. (*Communicated by Seth William Baker.*)	3674	27th Dec. 1867	Edward Joseph Hughes.
Butt hinges - - - - (*Communicated by Benjamin Franklin Barker.*)	3689	28th Dec. 1867	William Edward Newton.
Road-sweeping machines - - - (*Communicated by Jean Tailfer and Charles Léon Blot.*)	3720	31st Dec. 1867	Alexander Melville Clark.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
KNIVES, FORKS, SPOONS, SCISSORS, SHEARS; CLEANING KNIVES, FORKS AND SPOONS.			
Improved machinery for separating the fibres of woods into shreds suitable for converting into pulp for paper making, and also for stuffing and packing various useful articles. (*construction of cutting knives.*)	287	1st Feb. 1867	Frederik Bauman.
An improved process of preparing raw hide for the manufacture of various articles. (*knife handles.*)	394	12th Feb. 1867	William Henry Towers.
Scissors or shears - - - - - (*Communicated by Perez Christopher Clapp.*)	649	7th March 1867	Benjamin Snow, jun^{r}.
A new and useful process whereby leather, wholly or partially tanned, or animal tissue of any nature, is made hard, semi-elastic and transparent. (*for making knife handles.*)	651	7th March 1867	William Henry Towers.
Improvements in machinery or apparatus for cleaning boots and shoes, also applicable to the cleaning of other articles - - - (*cleaning plate.*)	655	8th March 1867	Henry Churchman. Frederick Braby.
Improvements in means or apparatus for sharpening knives and other edged articles, which improvements are also applicable to grinding and polishing various surfaces.	765	16th March 1867	Richard Canham.
Handles of spades, shovels and forks, and other similar articles. (*see* "HAMMERS.")	803	20th March 1867	John William Yates.
Manufacture of shoulders of the blades of knives, forks and other articles, and of the mode of the application thereof - - - -	843	23rd March 1867	William Harry Rayner. John Thomas Heath.
Improvements in setting razors and in the strops for that purpose.	895	27th March 1867	Jean Marie Laurent.
Improvements in the manufacture of spoons, forks and other similar articles, and in apparatus or machinery to be employed therein, parts of which said apparatus or machinery are applicable to other manufactures.	1055	9th April 1867	Daniel Joseph Fleetwood.
Improvements in steels and forks, and in sharpeners for knives, scissors and edged tools.	1101	13th April 1867	Ebenezer Stevens.
Knife-cleaning machines - - - -	1126	16th April 1867	John Lewthwaite.
Construction of knives, forks and other implements of cutlery. (*Communicated by George Parr.*)	1196	25th April 1867	William Robert Lake.
Improved machinery for burring wool, ginning cotton or other analogous purposes. (*teeth of saw-shaped blades.*) (*Communicated by Robert J. Clay, James T. Husted, Ebenezer Gilbert Burling and Cornelius Corson.*)	1215	26th April 1867	William Edward Newton.
Improved machinery for piercing and drilling tangs and scales for table knives and forks, table and butchers' steels and butchers' knives -	1359	8th May 1867	Joseph Nixon. Jabez Winterbottom.
An improved knife cleaner - - -	1693	8th June 1867	Obadiah Barrett. Henry Leggott.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
KNIVES, &C.—*continued.*			
An improved tool for opening metallic cases - (*Communicated by A. Hilger.*)	1852	25th June 1867	James Buckingham.
Apparatus for the manufacture of iced beverages - (*ice cutters.*) (*Communicated by Gustave D. Dows, Adolphe Clarck and Abraham Van Winkle.*)	1875	27th June 1867	William Edward Newton.
Knife-cleaning machines - - - -	2094	17th July 1867	George Weedon.
Pocket knives - - - - (*Communicated by L. B. Morris.*)	2226	1st Aug. 1867	William Robert Lake.
Table knives and forks - - - - (*Communicated by Frederick Jeremiah Miller.*)	2295	9th Aug. 1867	William John Miller.
Improvements in means or apparatus for sharpening knives and other edged articles, which improvements are also applicable to grinding and polishing various surfaces.	2603	14th Sept. 1867	Richard Canham.
Mode of securing handles and scales to every description of cutlery.	2876	12th Oct. 1867	James Drabble.
Apparatus for cleaning and polishing boots, shoes, knives, forks, plate and other articles.	2935	18th Oct. 1867	James John Holden.
Improvements in holders for lead and other marking materials, part of which improvements is also applicable as holders for other articles. (*holders for knives.*)	3015	26th Oct. 1867	William Edward Wiley.
Manufacture of spoons, forks and ladles - -	3037	28th Oct. 1867	Thomas Bennett.
Improvements in the manufacture of cutting tools and in the construction of tool holders.	3339	26th Nov. 1867	John Paterson Smith.
An improved cutting implement more especially designed for opening cases or cans formed of sheet metal.	3365	27th Nov. 1867	Milton Alexander Hamilton.
An improved knife cleaner - - -	3485	7th Dec. 1867	Obadiah Barrett. Henry Leggott.
Improvements in breaks for railway and other carriages, and in signalling and other apparatus in connection therewith, which improvements are also partly applicable to other purposes. (*to rotary knife cleaners.*)	3597	18th Dec. 1867	Thomas Comfield the younger.
LAMPS, LANTERNS, CHANDELIERS, CANDLESTICKS; LAMP FURNITURE, GLASSES AND SHADES; LIGHTING; PRODUCING LIGHT.			
Improvements in the means of and apparatus for lighting railway carriages, parts of which improvements are also applicable for other purposes.	58	9th Jan. 1867	William Thomas Sugg.
A new and improved fastener or lock, to be employed for securing the cover enclosing the flame in lamps known as the "Davy," or lamps of a similar description.	137	19th Jan. 1867	John Harding.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
LAMPS, &c.—*continued.*			
Lamps for burning paraffin oil and other volatile oils	171	23rd Jan. 1867	Arthur Chamberlain.
Certain improvements in lamps to be employed for the purpose of illumination. (*Communicated by Victor Cerisier.*)	190	25th Jan. 1867	John Lacey Davies.
An apparatus for securing lamps for railway and other carriages.	195	25th Jan. 1867	William Burley.
Improvements in lighting railway carriages with gas and in the apparatus employed therein.	230	29th Jan. 1867	François Constant Cambrelin.
Improvements in the lighting of mines, sewers and other similar subterraneous places in which inflammable and explosive gases may form and collect, and in the lamps or lanterns and other apparatus to be used therewith.	252	30th Jan. 1867	Henry Richardson Fanshawe.
Lamps for burning petroleum, spirit and other highly volatile liquids. (*Communicated by Alfred Barchou.*)	253	30th Jan. 1867	Léon Charles François Clerc.
Manufacture of envelope cases, blotting books and other articles, commonly called "writing" or library sets, and other similar articles. (*candlesticks.*)	305	4th Feb. 1867	George William Betjemann.
Candlesticks and candle holders - - -	333	6th Feb. 1867	Henry Dean. George Alfred Wheeler.
Utilizing of mineral and other oils for the production of heat and for illuminating purposes.	391	12th Feb. 1867	Sir James Young Simpson, Baronet.
Outside lamps or lanterns for shop fronts or other similar places.	404	13th Feb. 1867	Henry Houfe.
Lamps - - - - - - -	406	13th Feb. 1867	William Jones.
Improvements in the application of certain hydrocarbons to the obtainment of light and heat, and in the apparatus or means employed therein. (*Communicated by Adrien Muller and Ignace Matheï.*)	458	20th Feb. 1867	John Henry Johnson.
A new or improved candlestick - - -	521	26th Feb. 1867	Henry Ramus Du Pré.
Certain improvements in lamps - - -	525	26th Feb. 1867	George Young.
Apparatus for producing artificial light from gas, air and liquids.	556	28th Feb. 1867	Adolphe Gilbert Chalus.
Hydrocarbon oils used for safety and other lamps -	611	5th March 1867	Alexander Septimus Macrae.
Certain improvements in miners' safety lamps -	617	5th March 1867	George Rowley.
Carriages - - - - - - -	622	6th March 1867	George Henry Morgan.
Lamps for burning petroleum or other mineral oils.	667	8th March 1867	Gabriel Dümler.
Lamps for burning naphtha and like fluids - (*Communicated by Laslo Chandor.*)	678	9th March 1867	George Glover.
An improved apparatus for the promotion of economy in the combustion of gas, petroleum and other oils. (*Communicated by Oscar Louis and Jean Hoedemaker.*)	692	11th March 1867	Edward Thomas Hughes.
Instruments used in the sockets of candlesticks to secure candles therein.	726	13th March 1867	William Wootton.
Candlesticks - - - - - -	735	14th March 1867	Samuel Clarke.
Electro-magnetic and magneto-electric induction machines. (*for producing electric light.*)	842	23rd March 1867	Henry Wilde.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
LAMPS, &c.—*continued.*			
Apparatus for extinguishing lamps - - (*Communicated by Nathaniel Mansfield.*)	855	23rd March 1867	George Tomlinson Bousfield.
An improved mode of and means for closing and fastening the port lights of ships and other vessels. (*Communicated by Edward Seymour Hidden.*)	966	1st April 1867	William Robert Lake.
Certain improvements in miners' safety lamps -	992	3rd April 1867	Eric Hugo Waldenstrom.
Improvements in lamps, part of which improvements consists in the imitation of a candle and candlestick. (*Communicated by Edmond Armand Louis D'Argy.*)	1038	6th April 1867	William Clark.
Improved means of producing oxygen - - (*for lighting.*) (*Communicated by Cyprien Marie Tessie du Motay and Charles Raphael Maréchal.*)	1040	6th April 1867	Clinton Edgcumbe Brooman.
Lamps - - - - - - -	1163	22nd April 1867	Daniel Fryer.
A combined gas lighting and cooking apparatus - (*see* "GAS.")	1191	24th April 1867	Thomas South.
Magneto-electric machines - - - (*for producing electric light.*) (*Communicated by Joseph Nicolas Maximilien Van Malderen.*)	1210	26th April 1867	John Henry Johnson.
An improved combined taper holder and match box (*Communicated by John A. Whipple.*)	1250	30th April 1867	George Davies.
Portable lamps or illuminators - - -	1301	3rd May 1867	Thomas Crossley.
Improvements in magneto-electric signal lights and in apparatus connected therewith. (*for ships' use.*) (*Communicated by Auguste Berlioz.*)	1308	4th May 1867	John Henry Johnson.
Improvements in lamps and apparatus for facilitating the burning of petroleum, paraffin oil and other hydro-carbon fluids, for obtaining light and heat - - - -	1315	4th May 1867	Peter Brash. William Young.
An improved mode of and apparatus for burning hydro-carbon oils.	1329	6th May 1867	Thomas Crow.
An improved mode of and means for lighting gas lamps. (*Communicated by Charles Winkler.*)	1330	6th May 1867	John Henry Johnson.
Improvements in skylights and ventilators for steam vessels, part of which is applicable to other structures.	1349	7th May 1867	Norman Willis Wheeler.
Certain improvements in the means of casting or producing parts of steam, gas and water fittings, as also parts of lamps and other articles.	1355	8th May 1867	Charles Layton.
Improvements in the construction of a steam vessel suitable for ferrying laden trains across the ocean, complete, together with its landing-places, breakwaters, and modes of protection from marine insects and fouling, which improvements are also generally applicable to other vessels, and to the protection of iron and wood exposed to the action of the sea water. (*introducing lime and electric lights.*)	1503	21st May 1867	Edward Henry Cradock Monckton.
Improvements in gas blow pipes and in blow pipe torches or flames.	1530	23rd May 1867	Frederick Hardwick Johnson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
LAMPS, &c.—*continued.*			
Lamps for burning hydro-carbon and other oils -	1572	28th May 1867	George Henry James Simmons.
Construction of safety lamps for miners - -	1597	29th May 1867	Edward Jones.
Lamps for burning petroleum oil and other volatile liquid hydro-carbons - - - - -	1616	31st May 1867	James Hinks. Joseph Hinks.
Obtaining increased light in the combustion of illuminating matters.	1628	1st June 1867	Anton Georg Schaeffer.
An improvement in street and similar lamps -	1668	7th June 1867	Thomas Sturgeon.
Means or apparatus for signalling between different parts of railway trains.	1672	7th June 1867	Joseph Offord.
An improved arrangement of ships' signal lights -	1840	24th June 1867	Robert Capper. George Read.
Railway signals, point apparatus and lamps -	1867	27th June 1867	Joseph Grindley Rowe.
Miners' lamps - - - - - -	1908	29th June 1867	Charles Cosset Dubrulle.
Lamps for burning petroleum, shale and other mineral oils.	1910	29th June 1867	Charles Petit.
Miners' safety lamps - - - -	1938	3rd July 1867	David Pemberton Morison.
A new or improved combined lamp or match box - (*Communicated by Ludwig Böhler.*)	1947	3rd July 1867	Friedrich Leonardt.
Apparatus for producing or increasing the light or heat from carbonized atmospheric air, gas or gaseous mixtures, by the use of hydrocarbons, oils, spirits or other inflammable liquids or any mixture thereof.	2045	12th July 1867	Frederick Wilkins.
Framing of lighthouse lanterns and of the optical apparatus of lighthouses.	2054	12th July 1867	David Marr Henderson.
Lamps for burning hydrocarbon essential and mineral oils, alcohol, ether, turpentine and other spirits, animal and vegetable oils, and other inflammable liquids. (*Communicated by Louis Auguste Chobert.*)	2082	16th July 1867	Frederick Beioley Vallance.
Fastenings for window-sashes, casements, shutters, doors, port-hole lights and other similar objects.	2116	19th July 1867	John Rogers.
An apparatus for securing lamps for railway and other carriages - - - - -	2157	25th July 1867	Walter Howes. William Burley.
Lamps - - - - - - -	2186	27th July 1867	Edward Ravenscroft.
Improvements in burning petroleum and other hydrocarbon liquids for the production of heat and light, and in the apparatus or means employed therein. (*Communicated by Simon Stevens.*)	2196	29th July 1867	Benjamin Franklin Stevens.
Construction of the lamp commonly called the moderator lamp.	2199	30th July 1867	Jean Baptiste Auguste Menage.
Apparatus for the production of the electric light -	2221	1st Aug. 1867	Frederick Hale Holmes.
Miners' safety lamps - - - - -	2230	1st Aug. 1867	Samuel Higgs.
Lamps burning with oils and other fluids - (*Communicated by William Porter.*)	2256	5th Aug. 1867	Joseph Angus.
Apparatus for the production of the electric light -	2307	10th Aug. 1867	Frederic Hale Holmes.
Lamps - - - - - - -	2342	14th Aug. 1867	Alexander William Williamson.
Apparatus and means for burning combustible liquids, vapours and gases, to obtain heat and light therefrom - - - - -	2414	22nd Aug. 1867	James Lee Norton. George Hawksley.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
LAMPS, &c.—*continued.*			
Improvements in connection with miners' safety lamps.	2521	5th Sept. 1867	Henry Gardner.
Means or apparatus employed for lighting gas and other jets or lamps, candles, cigars and other articles.	2531	7th Sept. 1867	James Joseph Hicks.
An improved candle fixer - - - -	2626	18th Sept. 1867	James Soames.
Gas lamps and burners for the same - -	2643	20th Sept. 1867	Louis Lenzberg.
Improvements in the preparation of oils for illuminating or other purposes, and in the arrangement or construction of the lamps employed for burning the same. (*Communicated by Carl Wilhelm Herbst.*)	2648	20th Sept. 1867	John Garrett Tongue.
Production of light and heat for signalling and other purposes - - - - -	2691	24th Sept. 1867	Philip Howard Colomb. Francis John Bolton.
Lamps for burning hydrocarbon and other oils -	2708	26th Sept. 1867	George Henry James Simmons.
Lamps - - - - - - -	2741	28th Sept. 1867	Ellis Lever.
Improved methods of constructing steam generators for engines, new furnaces connected therewith, and the mode of working them, with machinery in combination with the uses to which they are applicable. (*lighting railway carriages.*)	2792	4th Oct. 1867	Henry Pinkus.
Railway and other carriages and various parts of the same. (*carriage lamps.*)	2796	4th Oct. 1867	Joseph Offord.
Improvements in mining and other lamps, and in lamp and candle cases and holders.	2818	7th Oct. 1867	Jonathan Aldous Mays.
Railway carriage and other lamps - - -	2831	8th Oct. 1867	John Bailey Brown.
Gaseliers - - - - - -	2840	9th Oct. 1867	William Potts.
Manufacture of lamp posts - - - -	2847	10th Oct. 1867	Richard Brotherton. Joseph Waldron.
Sliding gaseliers, chandeliers and other pendent lamps.	2970	22nd Oct. 1867	Henry William Sambidge.
Improvements in shades for gas and other lamps, and in the mode of fitting or applying the same.	3084	2nd Nov. 1867	John Scott.
Improvements in obtaining artificial light and in the apparatus employed therein.	3105	4th Nov. 1867	Joshua Kidd.
Improvements in apparatus to be applied to lamps and burners for the more perfect combustion of carburetted gases - - - - -	3110	5th Nov. 1867	Herbert Allman. Frederic Newton Gisborne.
Manufacture of glass globes and other hollow forms for gaseliers, chandeliers, candles, lamps and other similar purposes.	3158	8th Nov. 1867	Sibbit Landells.
Paraffin and other lamps - - - -	3162	8th Nov. 1867	Samuel Amos Kirby.
Suspended gas lamps - - - -	3171	9th Nov. 1867	Mark Rollason.
Gas lamps - - - - -	3172	9th Nov. 1867	Thomas Wells Ingram. Edward Curtis Kemp.
Construction of safety lamps for mines - -	3181	11th Nov. 1867	Samuel Buxton. William Gardam.
Safety lamps - - - - -	3209	13th Nov. 1867	Joseph Wilson Lowther. Thomas Bennett.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
LAMPS, &c.—*continued.*			
Construction of lamps for burning paraffin, petroleum or other mineral oils.	3272	18th Nov. 1867	Thomas Wood.
An improved safety lamp suitable for reading and night purposes.	3287	20th Nov. 1867	Henry Greene.
Lamp for burning liquid volatile hydrocarbons -	3296	21st Nov. 1867	Cephas Butler.
Lamps for burning petroleum and other volatile oils or essences.	3303	21st Nov. 1867	Ernest Thorold.
Improvements in the manufacture of gas, and in the treatment and application of such and other gases for cooking, warming, lighting, generating of steam and other purposes, combined with their use as a motive-power previous to being burned or consumed, and improvements in the apparatus for these purposes.	3318	23rd Nov. 1867	Peter Salmon.
Matches for lighting cigars and for other purposes - (*for lighting lamps.*)	3336	26th Nov. 1867	Robert Michael Letchford.
Miners' safety lamps - - - - -	3376	28th Nov. 1867	Thomas Story Horn.
Globes and glasses for the transmission of artificial and other light.	3404	30th Nov. 1867	Samuel Edward Tyrrell Steane.
Improvements in miners' safety lamps and in the mode of manufacturing the same.	3427	2nd Dec. 1867	Frederick Foster.
An improved lighting, heating and cooking apparatus, part of which is applicable to other purposes. (*Communicated by Zoeth Durfee.*)	3451	4th Dec. 1867	Edward Thomas Hughes.
Lamps to be used under water - - -	3527	12th Dec. 1867	John Ward.
Lamps - - - - - - - (*Partly communicated by François Maurel.*)	3532	12th Dec. 1867	William George Hanning. George Ballantyne Knott. Léon Charles François Clerc.
Treatment of paper and certain woven fabrics for rendering them ornamental and durable as articles of dress, and for decorative and ornamental purposes. (*lamp shades.*)	3535	12th Dec. 1867	Edward Reed Sintzenich.
An improved lamp - - - - -	3602	18th Dec. 1867	Michael Henry Collins.
Construction of miners' safety lamps - -	3640	23rd Dec. 1867	John Rowe.
Lamps or apparatus for burning naphtha, benzole and similar liquids, to represent a candle. (*Communicated by Laslo Chandor.*)	3701	30th Dec. 1867	George Glover.
Carriage lamps - - - - -	3711	31st Dec. 1867	William Barnes.

For lamp burners, *see* "GAS-BURNERS."

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
LEATHER, SKINS AND HIDES; ARTIFICIAL LEATHER AND PARCHMENT; CURRYING, TANNING, CUTTING AND ORNAMENTING LEATHER.			
Facilitating the removal of the bark from oak and other woods. (*for tanning.*) (*Communicated by Le Vicomte Louis de Villermont.*)	44	7th Jan. 1867	William Edward Newton.
Tanning - - - - - -	131	18th Jan. 1867	John Gange Franklin.
Improvements in the tanning of hides and skins, and in the apparatus employed therein.	148	21st Jan. 1867	George Lomas Loversidge.
A new and improved process of treating skins in order to separate therefrom the hair and wool, and in the preparation of the hair for the manufacture of hats. (*Communicated by Auguste Frayssé, jun^r.*)	172	23rd Jan. 1867	Henri Adrien Bonneville.
Preparation of oils for illuminating, lubricating and other purposes for which they may be applicable - - - - - (*for tanning purposes.*)	344	7th Feb. 1867	George Edward Pain. Charles Corroy.
An improved fabric in imitation of the skins of animals, suitable for the manufacture of ladies' mantles, carriage rugs and other articles.	356	8th Feb. 1867	Edwin Firth.
An improved process of preparing raw hide for the manufacture of various articles. ("*coribou.*")	394	12th Feb. 1867	William Henry Towers.
Manufacture and treatment of varnished or patent leather, oil or varnished cloth and other like materials.	446	19th Feb. 1867	Anne Amélie Fousset.
A new and useful process whereby leather, wholly or partially tanned, or animal tissue of any nature, is made hard, semi-elastic and transparent. ("*coribou.*")	651	7th March 1867	William Henry Towers.
An improved process for uniting cork or leather either separately or combined.	878	26th March 1867	Joseph Toussaint.
An improved apparatus for concentrating the extracts of bark for tanning and other purposes. (*Communicated by Benjamin Irving.*)	919	28th March 1867	William Robert Lake.
An improved mode of and machinery for obtaining the extracts of bark for tanning and other purposes. (*Communicated by Benjamin Irving.*)	920	28th March 1867	William Robert Lake.
An accelerated tanning by means of new processes and apparatus.	1091	12th April 1867	Constant Wilmet.
Machinery for dressing hides - - -	1518	22nd May 1867	James Collins. James Smethurst.
An improved fabric for the manufacture of machine belting and for other purposes. (*substitute for leather.*) (*Communicated by Zenas Marshall Crane and James Brewer Crane.*)	1524	22nd May 1867	Alexander Melville Clark.
An improvement in preparing wood and adapting it as a substitute for leather - - -	1564	27th May 1867	Robert Rowe Knott. John Jeyes.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
LEATHER, &c.—*continued.*			
Depilation and leather tanning - - -	1754	15th June 1867	Charles Erba.
Apparatus for sewing saddlery and other leather or strong materials. (*Communicated by Auguste Jacques Hurtu and Victor Joseph Hautin.*)	1798	20th June 1867	Alexander Melville Clark.
Improvements in tanning and in the machinery and apparatus to be employed therein.	2146	23rd July 1867	Sterling Bonsall.
An improved mode or improved means of coloring or ornamenting fabrics and other surfaces, and of preparing printing surfaces. (*Communicated by Charles Depoully.*)	2378	19th Aug. 1867	Clinton Edgcumbe Brooman.
Improved applications to be used for removing the wool or hair from the skins of animals.	2386	20th Aug. 1867	Henry Cridland.
Mode of removing and cutting the hides of animals for the manufacture of driving bands or tubes of leather. (*Communicated by Alois Eschenlohr.*)	2471	30th Aug. 1867	Alexander Melville Clark.
Manufacture or production of leather - -	2538	7th Sept. 1867	John Bayley. Thomas Bayley the younger.
The production and manufacture of compressed leather and articles of leather.	2559	10th Sept. 1867	John Harcourt Brown.
A new or improved material to be used as a substitute for oiled silk, bladders, gut-skins, india-rubber, and other waterproof materials and leather.	2604	14th Sept. 1867	John Jeyes.
A new and improved process of treating skins in order to separate therefrom the hair and wool, and in the preparation of the hair for the manufacture of hats. (*Communicated by Auguste Frayssé, junr.*)	2736	28th Sept. 1867	Henri Adrien Bonneville.
Utilizing refuse animal matters and producing skins and sheets therefrom.	2822	7th Oct. 1867	John Harcourt Brown.
An improved method of treating hides in the process of tanning, and for apparatus employed therein. (*Communicated by Moritz Michaelis, Isaac Hallenstein and Arthur Cleghorn.*)	2973	22nd Oct. 1867	William Brookes.
Manufacture of pressed leather - - -	2977	23rd Oct. 1867	Frederick John Bugg.
Improved modes of and means for curing, drying, preserving and packing meat, fruit, vegetables and other perishable substances. (*curing hides.*) (*Communicated by Daniel E. Somes.*)	3006	25th Oct. 1867	William Robert Lake.
An improved method of and apparatus for clearing skins destined for hatters' furs, from the coarse hairs (kemp, bristles or sleekcoats) by combustion.	3065	31st Oct. 1867	Ernest Donner.
An improved artificial compound chiefly designed for use as a substitute for india-rubber or caoutchouc. (*substitute for leather.*) (*Communicated by Austin Goodyear Day.*)	3108	4th Nov. 1867	William Robert Lake.
Manufacture of aprons, bibs and pouches, for the use of children and infants. (*of leather.*) (*Communicated by Siegfried Simon, of Berlin.*)	3170	9th Nov. 1867	Siegfried Simon, of London.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
LEATHER, &c.—*continued.*			
Treatment of rabbit, hare and other skins - - (*Communicated by Jean Leopold Roessler.*)	3349	26th Nov. 1867	John Henry Johnson.
Improved apparatus for making extracts from bark and other substances. (*tannin.*) (*Communicated by James Warren Jones.*)	3358	27th Nov. 1867	Alfred Vincent Newton.
Machinery for leather shaving and dressing -	3429	2nd Dec. 1867	William Bradshaw Leachman. John Holroyd.
Treatment of gutta-percha, indian-rubber, Honduras gum, and the other allied gums, for the production of a preparation or preparations applicable as a varnish, cement, paint, stain, water and air proof material, solid or elastic material, and for other purposes. (*substitute for leather.*) (*Communicated by Daniel Reed.*)	3542	13th Dec. 1867	Edward Reed Sintzenich.
Improvements in tanning and in the apparatus to be employed therein.	3649	23rd Dec. 1867	James Dawkins.
An improved machine for cutting the hair or fur from skins, for hat-making and for the manufacture of felt.	3703	30th Dec. 1867	Joseph Aschermann.
LOCKS, LATCHES, BOLTS, LOCK FURNITURE; KEYS, SAFES, STRONG BOXES.			
Improvements in the manufacture of burglar proof safes and in fastening the doors thereof.	176	23rd Jan. 1867	John Pinney.
Fireproof safes - - - - - (*Communicated by Rufus Sanborn.*)	229	29th Jan. 1867	William Snell.
Watch keys and other keys - - -	238	29th Jan. 1867	John Ritchie.
Locks - - - - - -	306	4th Feb. 1867	Maurice Cockerell.
Improvements in iron safes and for doors for the same and other purposes - - -	400	13th Feb. 1867	Joseph Westwood. Robert Baillie.
Means or apparatus employed to secure coal plates, trap doors and other similar articles.	436	16th Feb. 1867	Ebenezer Stevens.
Adjustable lock spindles - - - -	455	20th Feb. 1867	Michael Cavanagh.
Locks - - - - - -	654	8th March 1867	Frederic Pope.
China and earthenware knobs for locks and latches	664	8th March 1867	Stephen Hawthorn.
Locks and keys - - - - -	937	29th March 1867	Joseph Wolverson the younger.
Locks - - - - - - (*Communicated by James Braby.*)	1326	6th May 1867	William Robert Lake.
Locks and catches or staples connected therewith -	1353	7th May 1867	Henry John Saxby.
Adjustable lock spindles - - - -	1642	4th June 1867	Michael Cavanagh.
A new and useful fireproof safe - - -	1741	14th June 1867	Hezekiah Hazard Bryant.
Locks and latches - - - - -	2184	27th July 1867	Thomas Jones.
Construction of safes for containing articles of value	2382	19th Aug. 1867	Edward Alfred Cowper.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
LOCKS, &c.—*continued.*			
Certain improvements in the manufacture of safes and other depositories.	2696	25th Sept. 1867	Daniel Rowlinson Ratcliff.
Railway and other carriages and various parts of the same. (*locks for carriages.*)	2796	4th Oct. 1867	Joseph Offord.
Improvements in fastening and strengthening gates and in the means employed therefor. (*latch and catch.*)	3083	2nd Nov. 1867	William Darcey.
Locks - - - - - - -	3166	9th Nov. 1867	Samuel Hall. Maurice Whittingham.
Keys for locks - - - - -	3239	15th Nov. 1867	Robert Morson.
Door bolts and indicators - - - -	3550	13th Dec. 1867	John Grundy Settle.
Certain improvements in the manufacture and construction of carriages, landaus, and other similar vehicles. (*self-acting door bolts.*)	3600	18th Dec. 1867	Joseph Cockshoot, junior.
LOOKING-GLASSES AND FRAMES.			
Globular and other forms of glass for ornamenting mirrors and other reflecting surfaces, and for making up other articles of glass.	835	22nd March 1867	Edward Samuel Tucker.
An improved apparatus for preventing the access of insects to the interior of dwellings, and to pictures, mirrors and articles of furniture. (*net cover.*) (*Communicated by John George De Coursey.*)	1238	29th April 1867	John Henry Johnson.
Making frames for looking-glasses, pictures and mouldings.	1789	19th June 1867	Morris Lyons.
An improved process for the reduction of tin so as to render it applicable for coating metals and for other purposes. (*in imitation of silvering.*) (*Communicated by Jules Fenquiéres.*)	3517	11th Dec. 1867	Alexander Melville Clark.
MANGLING, IRONING, GOFFERING, ROUCHING.			
Charcoal box smoothing irons - - -	348	7th Feb. 1867	Enoch Siddaway.
Rollers for wringing and mangling - -	421	15th Feb. 1867	William John Knowles. John Edward Wilding.
Machinery for mangling or beetling fabrics -	653	8th March 1867	Colin Mather.
Ironing, pressing, finishing and damping machinery	793	19th March 1867	James Moore Clements.
Apparatus for raising weights and other appliances (*applied to a mangling machine.*)	990	3rd April 1867	Jonathan Pickering.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
MANGLING, &c.—*continued.*			
An improved pressing iron and appliance thereto for the use of tailors, hatters, laundresses, and also for domestic use - - - -	1065	10th April 1867	Francis Love. Thomas Davy. John Metcalf.
Improvements in finishing textile fabrics and in the machinery or apparatus connected therewith	1088	12th April 1867	William Robertson. James Guthrie Orchar.
Charcoal box-irons - - - - -	1506	21st May 1867	George Hurdman.
Improvements applicable to washing, wringing and mangling machines - - - -	1968	5th July 1867	Edward Owen Greening. Joseph Atkinson.
Improvements in the construction of elastic rollers for squeezing yarns and fabrics, and for other purposes - - - - - - (*used in mangles.*)	2174	27th July 1867	John Smith. William Schofield.
Improvements in breaks for railway and other carriages, and in signalling and other apparatus in connection therewith, which improvements are also partly applicable to other purposes. (*to mangles.*)	3597	18th Dec. 1867	Thomas Comfield the younger.
Improvements in the preparation of floss silk and in the manufacture of ruches.	3715	31st Dec. 1867	Charles Grey Hill.
MANTEL-PIECES.			
An improvement in the manufacture of bricks and other materials, without the aid of artificial heat, for hydraulic and other purposes. (*chimney pieces.*)	1147	20th April 1867	William Kirrage.
MANURE; TREATING SEWAGE.			
Preparing phosphatic minerals for use as manure - (*Partly communicated by Cornwall Henwood.*)	47	7th Jan. 1867	William Way.
An improved mode of and apparatus for purifying the impure waters emanating from sugar factories and other industrial establishments, applicable also to the purification of sewage water.	119	17th Jan. 1867	Ernst Süvern.
A new agricultural fecundating agent - -	279	1st Feb. 1867	Onézime Monnet-Laverpilière.
Improvements in treating or purifying sewage and in apparatus to be used for that purpose -	579	1st March 1867	William Parry. John Frearson.
Machinery and apparatus for moving mud, sewage, sand, small gravel or other similar matter, from one place to another. (*Communicated by James Burt.*)	702	12th March 1867	Thomas Burt.
Improvements in apparatus applicable to dry closets, for disinfecting and deodorizing and preparing manure, parts of which are applicable to the separating of cinders from ashes.	729	13th March 1867	James Conyers Morrell.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
MANURE, &c.—*continued.*			
Improvements in treating or purifying sewage and in apparatus to be used for that purpose -	788	19th March 1867	Alfred Henry Hart. William Parry.
Improvements in the manufacture of manure and in apparatus for the same. (*Communicated by Jean Georges Lucien Renard.*)	933	29th March 1867	William Clark.
Improvements in the treatment of fibrous materials and in apparatus to be used in such treatment. (*using refuse for manure.*)	1207	26th April 1867	John Watson Burton.
Disinfection and treatment of fecal and other matters for the manufacture of manure. (*Communicated by Louis Verstraet.*)	1229	27th April 1867	Emile Guenin.
Manufacture of manures - - - -	1243	29th April 1867	Thomas Bell. Thomas Lesslie. Gregson Bell.
Apparatus for the manufacture of artificial fuel, which apparatus may also be employed for other purposes. (*for drying and mixing artificial manures.*)	2065	13th July 1867	Henry Fletcher.
An improved fertilizing compost - - -	2198	30th July 1867	Alexander Watt.
Machinery or apparatus for washing coprolites -	2316	12th Aug. 1867	Joseph James Rawlings. Henry Wilkerson.
Treating phosphate of lime for the manufacture of manure and for other purposes.	2344	14th Aug. 1867	John Thomas Way.
An improved machine intended to divide, break or crush all substances capable of being triturated, more especially bones and horny substances of every kind, for converting them into manure. (*Communicated by Eugène Anduze.*)	2441	27th Aug. 1867	William Edward Gedge.
An improved process and apparatus for instantaneously disinfecting fecal and manuring matters, improving the same, and also rendering them fit for feeding domestic animals. (*Communicated by Louis Jean Baptiste Alphonse Lemoine and Antoine Marius Turrel.*)	2549	9th Sept. 1867	Frederick Tolhausen.
Improvements in treating sewage or other liquid matters so as to purify the more fluid portions thereof, and recover some of the contained matters for re-use in manufacturing processes, and in the preparation of others for use as manures - - - - -	2894	15th Oct. 1867	Thomas Henry Baker. Thomas Woodroffe.
Improvements in apparatus for supplying deodorizing matter to dry or earth closets, and in processes of and apparatus for treating the liquid portion of human or animal excreta after removal from such closets or from other receptacles.	2918	17th Oct. 1867	James Bannehr.
Manufacture of manures and disinfectants - -	2984	24th Oct. 1867	Frederich Gerhartz.
Improvements in and in apparatus for the treatment and for the reception of urine and fœcal matter.	2998	24th Oct. 1867	Robert Weare.
Manufacture of artificial manure - - -	3270	18th Nov. 1867	George Fitt.
An improved manure - - - -	3518	11th Dec. 1867	Allen Thomas Carr.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
MANURE, &c.—*continued.*			
Improvements in the extraction of ammonia from fermented and other liquids, and in the regeneration of the agents used in such extraction. (*from sewage waters.*) (*Communicated by Armand Coste and Louis Taupin De Rosnay.*)	3566	14th Dec. 1867	Alexander Melville Clark.
MAPS AND CHARTS.			
Mounts or holders for maps, tablets, prints, blinds and similar articles.	2615	17th Sept. 1867	Thomas Turner.
An improved map, blind, scene and picture roller -	2631	19th Sept. 1867	Philip Porter.
MATCHES, FUSES, PIPE AND CIGAR LIGHTS.			
An improved safety match-box - - - - (*Communicated by Henry Arthur Gadsden.*)	124	17th Jan. 1867	Henry Starr.
Improvements in filling splints into the dipping frames used in the manufacture of matches, and in apparatus to be employed for such purpose. (*Communicated by Ludwig Anton.*)	126	18th Jan. 1867	August Berens.
Ornamenting, printing, cutting, creasing, bending, embossing and manufacturing articles from wood and other materials. (*match boxes, matches, spills, &c.*)	155	22nd Jan. 1867	Edward Tomlinson.
Manufacture of envelope cases, blotting books and other articles, commonly called "writing" or library sets, and other similar articles. (*match boxes.*)	305	4th Feb. 1867	George William Betjemann.
An improved machine or machinery for packing a certain kind or description of friction match.	414	14th Feb. 1867	John Victor Toepken.
An improved machine for cutting scale-board, and for the manufacture of the scale-board or material cut by said machine into an improved fabric for structures generally. (*cutting match splints.*) (*Communicated by John Kinney Mayo.*)	1051	8th April 1867	William Clark.
An improved combined taper holder and match box. (*Communicated by John A. Whipple.*)	1250	30th April 1867	George Davies.
Improved machinery for making tapers - -	1907	29th June 1867	Joseph James Lane.
A new or improved combined lamp or match box - (*Communicated by Ludwig Böhler.*)	1947	3rd July 1867	Friedrich Leonardt.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
MATCHES, &c.—*continued.*			
Means and apparatus for ornamenting, printing, coloring, enamelling, staining, cutting, creasing, bending and manufacturing articles from wood and other materials.	2139	23rd July 1867	Edward Tomlinson.
Machinery for cutting into lengths tapes or wax threads for vesta matches, and placing the said lengths in laths or clamps, and for cutting into lengths spills or other strips or rods.	2231	1st Aug. 1867	John Birch.
Improvements in cigar and pipe lights, and in their mode of construction, composition and manufacture.	2459	29th Aug. 1867	Henry Joseph Simlick.
Improvements in lucifer matches or tapers, and in the apparatus for holding and igniting the same - - - - -	2662	21st Sept. 1867	Bewicke Blackburn. Alexander Bewicke Blackburn.
Match boxes - - - - - (*Communicated by Régis de Monti.*)	2764	1st Oct. 1867	William Edward Gedge.
Manufacture of matches - - -	3016	26th Oct. 1867	Robert Michael Letchford.
Matches for lighting cigars and for other purposes.	3336	26th Nov. 1867	Robert Michael Letchford.
MEASURING AND GAUGING LENGTH, SIZE AND QUANTITY; LOOM AND OTHER MACHINE REGISTERS; APPOINTMENT AND DATE INDICATORS; VOTE REGISTERS.			
Improvements in and adaptation of cylinder printing machines to the double purpose of letter press and lithography, also a new mode of damping litho stones, and a new mode of registering and pointing in such machines.	427	15th Feb. 1867	Thomas William Nicholson.
Improvements in apparatus applicable to dry closets, for disinfecting and deodorizing and preparing manure, parts of which are applicable to the separating of cinders from ashes. (*ash measuring apparatus.*)	729	13th March 1867	James Conyers Morrell.
Fittings for stables, harness rooms and cow houses. (*corn shoot and meters.*)	993	3rd April 1867	James Musgrave.
An improved machine for cutting scale-board, and for the manufacture of the scale-board or material cut by said machine into an improved fabric for structures generally. (*for measures.*) (*Communicated by John Kinney Mayo.*)	1051	8th April 1867	William Clark.
An improved dial to be used as an office or a private or commercial indicator.	1201	25th April 1867	John Raywood.
Instruments or apparatus for measuring spirits and other liquids.	1591	29th May 1867	James Martin French.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
MEASURING LENGTH, &c.—*continued.*			
Improvements in or applicable to machines for sizing yarns or threads preparatory to weaving, and also to slubbing and roving frames and to other machines - - - - (*measuring and marking.*)	1744	15th June 1867	James Fletcher. William Carr.
Apparatus for measuring horses' feet and for adapting and fitting shoes thereto. (*Communicated by Auguste Clément.*)	1815	21st June 1867	Alexander Melville Clark.
Apparatus for moulding artificial fuel - -	1830	22nd June 1867	Sydney Hall. William Henry Parsons.
An improved method of guaging and cutting soap	1866	27th June 1867	Edwin Whele.
Improved machinery or apparatus to be employed in the manufacture of wire healds for looms for weaving. (*measuring the wires.*)	1870	27th June 1867	James Gabbott.
Self-feeding smokeless furnaces - - - (*and measuring supply.*)	1955	4th July 1867	Thomas Vicars the elder. Thomas Vicars the younger. James Smith.
Indexes or tell tales applicable to fluid meters and other counting or measuring apparatus.	2371	17th Aug. 1867	William Willmer Pocock.
Signalling and indicating apparatus - - (*indicating revolutions of steam-engines.*)	2468	29th Aug. 1867	Arthur McNutt Wier. Marshall Arthur Wier.
Jointed rules - - - - -	2807	5th Oct. 1867	Alfred Bradburn. Samuel Thomas Marsh.
Improvements in the manufacture of corsets and in apparatus for taking measurements for the same. (*Communicated by François Henri Mariotte and Edouard Turpin.*)	2858	11th Oct. 1867	George Davies.
Apparatus for taking and registering votes in deliberative assemblies.	3174	9th Nov. 1867	George Farren.
Apparatus for measuring approximately the quantities of earth-work in continuous cuttings or banks such as are used in the formation of railways.	3506	10th Dec. 1867	William Henry Barlow.
Apparatus to be applied to looms for weaving - (*variable index.*)	3547	13th Dec. 1867	William McIlwraith. Joseph Bonner.
A mechanical tell-tale alarm pointing and reporting clock.	3693	28th Dec. 1867	Lewis Hasluck.

For measuring angles, *see* "COMPASSES."

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
MEASURING AND REGISTERING PROGRESS OF LOCOMOTIVES, CARRIAGES AND SHIPS; CARRIAGE TURNSTILES, REGISTERS AND COUNTING APPARATUS; LOGS AND SOUNDERS; MEASURING AND INDICATING FLOW OF STREAMS.			
Machinery or apparatus for indicating the speed of locomotives and railway trains.	581	1st March 1867	Frederick Warner Jones.
Apparatus for measuring the speed of ships and other vessels, and the velocity of running or flowing water. (*Communicated by Louis Alfred Anfonso.*)	663	8th March 1867	Michael Henry.
Portable apparatus for issuing tickets progressively numbered, to passengers in public conveyances and to visitors at public meetings.	1183	24th April 1867	John Haworth.
A new indicator for carriages - - -	1505	21st May 1867	Marc Runkel.
Means or apparatus for registering the number of passengers carried in omnibuses and other vehicles.	1773	17th June 1867	William Cooke.
Apparatus for registering the number of passengers carried in omnibuses. (*Communicated by Louis Auguste Gille and François Beatry.*)	2392	21st Aug. 1867	William Thomas.
Improved apparatus to be used for registering the number of passengers entering vehicles.	2573	11th Sept. 1867	William Baird.
Apparatus for registering passengers travelling in public vehicles.	2740	28th Sept. 1867	George Rodolph Solomon, jun^{r}.
Registering apparatus applicable to omnibuses and other vehicles.	2821	7th Oct. 1867	Thomas Ollis.
Improvements in marking boards used in the game of billiards, parts of which are applicable to registering the number of persons passing through pay gates or conveyed by vehicles.	3029	28th Oct. 1867	George Smith.
An improved machine for forming, printing and counting labels.	3147	7th Nov. 1867	Isaac Hewitt.
Improvements in omnibuses and similar vehicles, and in apparatus in connection therewith, part of which improvements are also applicable to railway and other carriages. (*turnstiles and counters.*)	3178	11th Nov. 1867	William Thompson.
Improvements applicable to apparatus employed as a ticket register - - - -	3235	15th Nov. 1867	George Rodolph Solomon, jun^{r}. Marcus Bebro.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
MEDICAL TREATMENT OF ANIMALS, WASHING, DIPPING AND SMEARING.			
Means and apparatus employed for the cure of the disease called " foot rot " in sheep.	564	28th Feb. 1867	Murhall Woolrich.
Bathing apparatus applicable principally for horses (*Communicated by the Chevalier Achille Angelini.*)	985	2nd April 1867	William Clark.
Improvements in the treatment of fibrous materials and in apparatus to be used in such treatment. (*washing sheep.*)	1207	26th April 1867	John Watson Burton.
Purifying or preservative compounds to be applied to the fleeces or skins of sheep and other animals.	1900	29th June 1867	Alexander Morrison Fell.
An improved composition to be applied to sheep and other animals, for the purposes of destroying vermin and parasitical life thereon, and for protecting them therefrom.	2305	10th Aug. 1867	Robert Girdwood.
Ozonized or oxygenated bread, biscuits, cakes and other substances. (*for curing disease in animals.*)	2976	23rd Oct. 1867	Thomas Welton.
MEDICINES AND CURATIVE APPARATUS; MEDICAL BATHS; INHALING AND RESPIRATORY APPARATUS.			
An improved pneumatic apparatus for the treatment of diseases in an attenuated atmosphere. (*Communicated by George Hadfield.*)	55	8th Jan. 1867	William Edward Newton.
A new or improved portable miniature dispensary and instrument case, for the use of medical practitioners and for general purposes.	372	9th Feb. 1867	Edmund Adolphus Kirby.
A new and improved means of preserving solutions of certain plants and matters in a concentrated state. (*for softening water for hygienic lotions.*) (*Communicated by Clémence d'Estains, widow of Léon de Wailly.*)	684	11th March 1867	Henri Adrien Bonneville.
An improved preparation of biscuit and other pastry and bread. (*tonic.*)	766	16th March 1867	James Hickisson.
Bathing apparatus applicable principally for horses (*or for invalids.*) (*Communicated by the Chevalier Achille Angelini.*)	985	2nd April 1867	William Clark.
Stoppers or means for stopping the ears - - (*Communicated by Joseph Porter Michaels.*)	995	3rd April 1867	William Clark.
Improvements applicable to feeding bottles, which improvements are also applicable to other useful purposes.	1010	4th April 1867	William Charles Webber.
Preparation and application of mustard for curative purposes. (*Communicated by Paul Rigollot.*)	1212	26th April 1867	Emile Guenin.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
MEDICINES, &c.—*continued.*			
Improvements upon the instrument called the spray producer. (*for cure by inhalation.*)	1222	27th April 1867	James Dewar.
A new or improved method for obtaining an essential oil applicable as a curative agent or medicine in the treatment of inflammatory joint diseases, rheumatism, sprains, bruises and similar ailments. (*Communicated by Lachlan Jamieson.*)	1617	31st May 1867	Frederick William Dolman.
Flexible galvanic batteries applicable to medico-electric purposes.	1750	15th June 1867	Richard Beard.
An improved system of dispensing medicines and preparing drugs therefor, together with an improved portable miniature dispensary and instrument case applicable to such system.	2239	2nd Aug. 1867	Edmund Adolphus Kirby.
Construction of machines for splitting or for splitting and cutting sarsaparilla and other woody or vegetable fibrous substances. (*Communicated by Monsieur Gruvel, fils.*)	2310	12th Aug. 1867	Erembert Courtin.
Pill-making machines - - - -	2347	15th Aug. 1867	Thomas Bushby.
A new or improved preparation or material to be used for the purpose of affording instant relief to persons afflicted with asthma or subject to any other affections of the lungs or chest.	2524	6th Sept. 1867	Saul Cassam.
An improved means and apparatus for preventing sea sickness.	2602	14th Sept. 1867	Hortense Anastasie Bordin.
Manufacture of Epsom salts - - - (*Communicated by Messrs. Vorster and Grüneberg.*)	2685	23rd Sept. 1867	Augustus Ziegele.
An improved preparation or lotion for diseases of the eyes.	2828	8th Oct. 1867	Angelo Ticozzi.
A medical electric bath for men and animals, on the filtering principle by triple current which is connected with the earth. (*Communicated by Jean Baptiste Marie Potin.*)	2835	9th Oct. 1867	Adolphe Danilecki.
Ozonized or oxygenated bread, biscuits, cakes and other substances. (*curing disease.*)	2976	23rd Oct. 1867	Thomas Welton.
Vessels and apparatus for the preserving and more convenient use of unguents. (*salves.*)	3378	28th Nov. 1867	James Murdoch Napier.
Improvements in the preparation of sulphate of magnesia, applicable to the treatment of the crude potash salts of Strassfurt, and the refuse from the manufacture of chloride of potassium. (*Communicated by Julius Vorster and Hermann Grüneberg.*)	3389	29th Nov. 1867	Charles Albisser.
Improvements in the manufacture of soda and other ærated waters, and in the manufacture of ærated bread. (*residue for making Epsom salts.*)	3573	16th Dec. 1867	William Huskisson the younger.
Manufacture of bicarbonate of potash and soda - (*residue for making Epsom salts.*)	3581	16th Dec. 1867	William Huskisson the younger.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
METALLIC SALTS AND OXIDES.			
Improvements in the manufacture of chlorine, and in the production of artificial oxides of manganese for employment both in that and other manufactures.	133	18th Jan. 1867	Walter Weldon.
Treatment of ores of lead for the purpose of obtaining salts and colours of the same - -	325	6th Feb. 1867	James Wright. Thomas Cobley.
Improvements in separating zinc from certain ores or minerals, and in recovering other substances found therewith. (*oxichloride of lead.*)	997	3rd April 1867	Peter Spence.
Improvements in oxidizing minerals, ores and metals, in reducing oxides of metals, in separating certain metals from each other, in kilns, furnaces or other apparatus for these purposes, and in the treatment of the products obtained therefrom.	1042	6th April 1867	William Henderson.
Improvements in obtaining useful products from certain materials produced in the process of galvanizing or coating iron with zinc. (*sulphate of zinc.*)	1107	13th April 1867	Charles Crockford.
Manufacture of white lead - - - (*Communicated by Thomas Mara Fell and Ambrose George Fell.*)	1464	17th May 1867	William Robert Lake.
An improved mode of producing chloride or oxychloride of lead, and treating the same for manufacturing white lead. (*Communicated by Thomas Mara Fell and Ambrose George Fell.*)	1465	17th May 1867	William Robert Lake.
Treatment and utilization of certain ferruginous salts and solutions - - - -	1556	25th May 1867	Isham Baggs. Frederick Braby.
Improvements in the manufacture and treatment of white lead, and in apparatus connected therewith. (*Communicated by Robert Griffith Hatfield.*)	1728	12th June 1867	Alexander Melville Clark.
Utilization of a certain waste material obtained in the manufacture of hydrocarbon liquids. (*artificial plumbago.*)	1888	28th June 1867	John Carrington Sellars.
Improvements in the production of artificial oxides of manganese, and in the manufacture of chlorine by means thereof, partly applicable also to other purposes.	2501	4th Sept. 1867	Walter Weldon.
Treating the oxide of iron residues of gas purifying in order principally to extract sulphur therefrom.	2618	17th Sept. 1867	Thomas Bell.
Mode of and apparatus for the reduction of sulphate of iron crystals. (*Partly communicated by Charles Madge.*)	3217	13th Nov. 1867	Edward Madge.
Improvements in decomposing the sulphides of copper, silver, nickel, cobalt, lead, barium, strontium and calcium, and in obtaining copper, sulphur and other products - - -	3232	14th Nov. 1867	John Clark. Alexander Esilman.
Means of and apparatus for treating metals and minerals in order to produce their oxides or other chemical or mechanical combinations, and to separate metals from their ores or from their alloys. (*Communicated by Zabdiel Adams Willard and William Gardner Adams.*)	3360	27th Nov. 1867	Henry Francis Gardner.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
METALLIC SALTS, &c.—*continued.*			
An improved material or composition to be employed for covering or coating the interior surfaces of moulds, crucibles or ducts, previous to their receiving the molten metal in the process of casting and for other purposes. (*graphite.*)	3473	6th Dec. 1867	James Durrans.
METALS.			
I.—Smelting, Extracting and Reducing Metals; Treating Ores; Refining, Tempering and Annealing Metals; Manufacture of Iron and Steel; Metallic Alloys.			
Improvements in bakers' and other ovens, and also in scrap and other furnaces.	80	11th Jan. 1867	John Tomlinson.
An improved method of separating silver from lead. (*Communicated by Francisco Marquez-Millan.*)	87	14th Jan. 1867	William George Blagden.
An improvement in the manufacture of cast steel -	88	14th Jan. 1867	Robert Mushet.
Vertical furnaces for melting and refining metals -	111	16th Jan. 1867	John Clayton.
Improvements in blast furnaces and in the method of working the same. (*Communicated by Albert Philippe Adrien Accarain.*)	161	22nd Jan. 1867	William Clark.
Puddling and other furnaces for melting, boiling or heating iron - - - -	210	26th Jan. 1867	John Allcock Jones. Richard Howson.
An improved process for obtaining metals from their ores. (*Communicated by John Nevious Wyckoff.*)	285	1st Feb. 1867	William Edward Newton.
Construction and arrangement of kilns and ovens - (*for ores.*)	290	2nd Feb. 1867	John Gilbert Robinson.
Boilers or apparatus applicable to the generation of steam and to other purposes. (*for puddling furnaces.*)	303	2nd Feb. 1867	Benjamin Harlow.
An improved process for vitrifying iron, cast-iron and steel.	322	5th Feb. 1867	Joseph Ballouhey.
Treatment of ores of lead for the purpose of obtaining salts and colours of the same - -	325	6th Feb. 1867	James Wright. Thomas Cobley.
Manufacture of spelter from zinc ashes and refuses obtained when coating iron with zinc.	337	6th Feb. 1867	James Graham.
Machinery or apparatus for breaking and grinding stone, ores and other hard materials	456	20th Feb. 1867	Thomas Archer the younger.
Manufacture of certain metallic alloys - -	505	23rd Feb. 1867	Philip Albert Muntz.
Machinery for mining, cutting or working coal and other minerals, and for hammering metals and crushing minerals.	535	27th Feb. 1867	Andrew Howat.
Manufacture of iron and steel - - -	546	27th Feb. 1867	Alexander Lyman Holley.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
METALS (*Smelting*)—*continued.*			
Machinery for grinding, crushing, hulling, or shelling various kinds of farm or vegetable produce, applicable also to the crushing or grinding of minerals and other hard substances.	566	28th Feb. 1867	John Bellerby the younger.
Improvements in the means and apparatus for producing oxygen, and in the application of the same for metallurgical and other purposes. (*Communicated by Henri Adolphe Archereau.*)	568	28th Feb. 1867	William Clark.
Improvements in the manner of reducing and refining metallic ores, more particularly ores of iron, and in converting iron into steel, and in apparatus to be used in connection therewith.	652	7th March 1867	Silas Covell Salisbury.
Machinery for crushing stones, minerals and other like substances - - - -	680	9th March 1867	Benjamin Walker. John Frederick Augustus Pflaum.
Extracting silver from alloys of zinc with lead - (*Communicated by Francisco Marquez-Millan.*)	737	14th March 1867	William George Blagden.
Annealing or treating cast iron articles - -	763	16th March 1867	John Kennedy.
Manufacture of ships' sheathing, armour sheathing and fastenings. (*composite metals.*)	856	23rd March 1867	Joseph Betteley.
Machinery and apparatus employed in the manufacture of iron and steel by the Bessemer process.	888	27th March 1867	Henry Sharp.
Hot air stoves for blast furnaces - - -	893	27th March 1867	Richard Howson.
Improvements in the manufacture of iron and steel, and in furnaces and apparatus to be used in the said manufacture.	909	28th March 1867	Thomas Roper.
Improvements in the smelting and treatment of iron and other ores, in the fuel and other materials made use of in such treatment, and in apparatus for supplying the same to blast, puddling and any other furnaces and fires in or by which great heat is required to be generated, parts of which improvements are applicable also to other purposes - - -	922	29th March 1867	Enoch Harrison Aydon. Edward Field.
Blast furnaces or cupolas - - - -	944	30th March 1867	Thomas Prideaux.
Improvements in separating zinc from certain ores or minerals, and in recovering other substances found therewith.	997	3rd April 1867	Peter Spence.
Improved means of producing oxygen - - (*for fusion of metals.*) (*Communicated by Cyprien Marie Tessié du Motay and Charles Raphael Maréchal.*)	1040	6th April 1867	Clinton Edgcumbe Brooman.
Improvements in oxidizing minerals, ores and metals, in reducing oxides of metals, in separating certain metals from each other, in kilns, furnaces or other apparatus for these purposes, and in the treatment of the products obtained therefrom.	1042	6th April 1867	William Henderson.
Improvements in fire-bars, and in the manufacture of the iron to be used in the construction thereof, the iron so manufactured being applicable also to other purposes.	1070	10th April 1867	William Colborne Cambridge.
An improvement or improvements in the manufacture of iron.	1087	12th April 1867	William Henry Dawes.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
METALS (*Smelting*)—*continued.*			
Manufacture of steel and soft iron from cast iron -	1122	16th April 1867	James Hargreaves.
Improvements in the treatment of peat and in the manufacture of peat charcoal, and in the machinery or apparatus employed therein. (*fuel used for metallurgical purposes.*) (*Communicated by Augustus Figge.*)	1190	24th April 1867	John Henry Johnson.
A novel flux applicable to welding, brazing and puddling purposes. (*Communicated by Anthony Hindermyer.*)	1264	1st May 1867	John Henry Johnson.
Improvements in the conversion of cast iron into wrought iron, part of which improvements is also applicable to the conversion of cast iron into steel.	1295	3rd May 1867	John Heaton.
Manufacture of steel tyres, rails, axles, bridge links, shafting, and other articles where uniformity in the wearing surfaces and increased durability is required. (*submitting to cementation before hammering.*)	1327	6th May 1867	George Wilson.
Improvements in puddling furnaces, also applicable to other furnaces of similar construction.	1409	13th May 1867	John Gay Newton Alleyne.
Preparation of ores, metals and other substances for working in furnaces.	1411	13th May 1867	George Lunge.
Apparatus for treating mineral substances - -	1443	15th May 1867	Edmund Edwards.
Improvements in producing and increasing combustion in blast and other furnaces, also for generating steam and for other similar or analogous purposes.	1454	16th May 1867	John Martin Stanley.
Treating iron to obtain metallic compounds for various uses.	1461	17th May 1867	Andrew Linmere Dowie.
Improvements in marine and land boilers and their furnaces, and also other furnaces used for the manufacture of iron and other purposes.	1467	17th May 1867	Simon Regan.
Arrangement and construction of furnaces for steam-boilers and various other useful purposes. (*Communicated by Emmanuel Minary.*)	1495	20th May 1867	John Garrett Tongue.
Treating iron ores to remove phosphorous therefrom.	1498	20th May 1867	Edward Young.
Refining lead - - - -	1515	21st May 1867	Oscar Wassermann. Johann Heinrich Herbst.
Improvements in furnaces for heating the air stoves of blast furnaces and for other purposes, and in utilizing the products of combustion from such stoves.	1517	22nd May 1867	Daniel Adamson.
Manufacture of steel and soft iron from cast iron -	1520	22nd May 1867	James Hargreaves. Thomas Robinson.
Manufacture or melting of cast steel - -	1549	24th May 1867	Charles Sanderson.
Furnaces for calcining copper ores and other ores and metals.	1559	25th May 1867	William Price Struvé.
Doors and door frames of furnaces - - - (*puddling furnaces.*)	1574	28th May 1867	William Coulson.
Reverberatory furnaces used for puddling, melting and heating iron, and for other purposes -	1615	31st May 1867	Benjamin Shakespeare. William Shakespeare.
Certain improvements in the manufacture of iron and steel, and in the means or apparatus for effecting the same.	1635	3rd June 1867	William Haden Richardson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
METALS (*Smelting*)—*continued.*			
Galvanic batteries (*for metallurgy.*)	1654	5th June 1867	Charles Boulay.
Apparatus employed in the manufacture of zinc	1701	10th June 1867	Thomas Robinson. John Pierce.
Manufacture of iron and steel	1747	15th June 1867	John Onions.
An improved method of toughening brittle gold bullion, of refining alloyed gold, and of separating therefrom any silver they may contain.	1767	17th June 1867	Francis Bowyer Miller.
Construction of heating and annealing furnaces (*Communicated by the Union Car Spring Manufacturing Company.*)	1784	18th June 1867	William Sparks Thomson.
Manufacture of steel	1803	20th June 1867	Henry Kinnaird York.
Certain improvements in the construction of water tuyeres	1823	22nd June 1867	John Onslow. Francis Northall.
A new metallic zinc paint (*and forming alloys.*)	1845	25th June 1867	James Webster.
A certain improved mode of manufacturing iron and steel.	1905	29th June 1867	William Haden Richardson.
An improved reducing machine for grinding and pulverising metallic ores and any other substances.	1939	3rd July 1867	Thomas Borlase.
Construction of apparatus and furnaces for puddling iron.	1980	6th July 1867	Thomas Morgan.
Manufacture of steel and soft iron from cast iron	2046	12th July 1867	James Hargreaves.
Machinery or apparatus for crushing and pulverizing ores, stones and other hard substances.	2092	17th July 1867	Thomas Archer, junior.
Utilizing certain materials or products obtained during the manufacture of steel and iron.	2114	19th July 1867	James Hargreaves.
Manufacture of cast steel and its derivatives (*Communicated by Emile Martin and Pierre Emile Martin.*)	2166	25th July 1867	Clinton Edgcumbe Brooman.
Hot-blast stoves	2182	27th July 1867	Humphrey Chamberlain.
Manufacture and treatment of certain kinds of iron	2185	27th July 1867	John Wood.
Improvements in the manufacture of iron, and in the production of "fetling" for improving the quality and yield of iron in the process of reduction	2189	29th July 1867	Thomas Greener. William Ellis.
An improved system of flattening and straightening saws and similar plates or blades of steel during the process of hardening.	2248	3rd Aug. 1867	John Russell.
Blast furnaces	2264	5th Aug. 1867	John Heaton.
An improved metallic alloy and in the applications of the same. (*Communicated by Georges Achille Schmitte and Hilaire André Levallois.*)	2285	8th Aug. 1867	Alexander Melville Clark.
Preparation of titaniferous iron sands for smelting	2292	9th Aug. 1867	William Richard Dawson.
An improved method or process for removing sulphur, phosphorus and other impurities from iron, steel and other metals. (*Communicated by John Francis Bennett.*)	2308	12th Aug. 1867	Charles Denton Abel.
Puddling and other furnaces employed for melting, boiling or heating iron	2337	14th Aug. 1867	John Allcock Jones. Richard Howson. John Gjers.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
METALS (*Smelting*)—*continued.*			
Improvements in furnaces and in processes and apparatus in connection therewith, principally applicable to metallurgical operations.	2395	21st Aug. 1867	Charles William Siemens.
Improvements in the manufacture of iron and steel, and in apparatus employed in the said manufacture. (*Communicated by Virgil Warren Blanchard.*)	2420	23rd Aug. 1867	William Robert Lake.
Manufacture of iron and steel - - - (*Communicated by Alexander Lyman Holley.*)	2438	27th Aug. 1867	George Haseltine.
Improvements in the manufacture of malleable iron, cast iron and steel, and in the construction of furnaces to be employed for such purposes.	2484	2nd Sept. 1867	Charles Gelstharp.
Improvements in machinery for puddling, and in puddling and other furnaces.	2541	7th Sept. 1867	James Whitham.
Furnaces for melting iron and other metals, and for smelting ores. (*Partly communicated by Heinrich Krigar.*)	2553	9th Sept. 1867	Jacob Eichhorn.
Machinery for washing ores, grain, wool and other mineral, vegetable and animal substances.	2568	11th Sept. 1867	Colin Mather.
Improvements in the manufacture of iron and in furnaces used in the manufacture of iron.	2571	11th Sept. 1867	William Baker.
Improvements in the manufacture of iron and steel, and in furnaces therefor.	2596	13th Sept. 1867	Samuel Dalton.
Blast furnaces - - - - - (*Communicated by Frederick Lürmann.*)	2611	17th Sept. 1867	Carl Holste.
Manufacture of iron - - - -	2637	19th Sept. 1867	Jacob Geoghegan Willans.
Manufacture of iron - - - -	2657	21st Sept. 1867	James Hargreaves.
Improvements relating to furnaces - -	2679	23rd Sept. 1867	William Beardmore. Walter Brock. Alexander Carnegie Kirk.
Manufacture of iron and steel - - -	2704	25th Sept. 1867	Joseph Bower.
Improvements in smelting and treating iron and in blast furnaces or cupolas for such purposes.	2745	28th Sept. 1867	Thomas Prideaux.
Improvements in the manufacture of cast steel and in furnaces to be employed therein. (*Communicated by Francis Ellershausen.*)	2756	1st Oct. 1867	Edwin Powley Alexander.
Manufacture of strip or sheet iron for certain purposes.	2768	2nd Oct. 1867	Richard Hobbs Taunton.
Improvements in heating blast for smelting and other furnaces, and in the apparatus or means connected therewith.	2781	3rd Oct. 1867	Robert Dick.
Utilization of Bessemer steel scrap - - -	2789	3rd Oct. 1867	Arthur Thomas Becks.
Improved methods of constructing steam generators for engines, new furnaces connected therewith, and the mode of working them, with machinery in combination with the uses to which they are applicable. (*smelting furnaces.*)	2792	4th Oct. 1867	Henry Pinkus.
Manufacture of zinc - - - -	2819	7th Oct. 1867	David Swan, junior.
Manufacture and refining of iron and steel -	2832	8th Oct. 1867	John Player.
Improvements in the manufacture of rails, bars and other articles of iron, and in the apparatus employed therefor - - - - -	2839	9th Oct. 1867	John James. Thomas Jones.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
METALS (*Smelting*)—*continued.*			
Method of and apparatus for heating - - (*reverberatory furnaces.*)	2862	11th Oct. 1867	Robert Alfred Wright.
Improvements in smoke-consuming apparatus for steam-boiler and other furnaces, and in machinery for manufacturing parts of the same. (*for blast furnaces.*)	2871	12th Oct. 1867	Jean Baptiste Pierre Alfred Thierry.
Tuyeres for blast furnaces and other purposes -	2953	21st Oct. 1867	William Barrett. Charles Martin.
Furnaces - - - - - - (*for puddling.*)	3042	29th Oct. 1867	Edward Brown Wilson.
Tuyeres for blast furnaces - - -	3180	11th Nov. 1867	Charles Blakemore Hodgetts.
Certain improvements in the manufacture of iron and steel, and in the means or apparatus for effecting the same.	3226	14th March 1867	William Haden Richardson.
Improvements in decomposing the sulphides of copper, silver, nickel, cobalt, lead, barium, strontium and calcium, and in obtaining copper, sulphur and other products - - -	3232	14th Nov. 1867	John Clark. Alexander Esilman.
Refining copper - - - - (*Communicated by Frederic Le Clerc.*)	3243	15th Nov. 1867	Alexander Melville Clark.
An improved gas furnace - - - - (*metallurgical.*)	3245	15th Nov. 1867	Richard Howson.
A new or improved process of and apparatus or furnaces for the manufacture of metal direct from the ore. (*Communicated by Pierre Emile Martin.*)	3264	18th Nov. 1867	Clinton Edgcumbe Brooman.
Certain improvements in the manufacture of iron and steel.	3282	20th Nov. 1867	William Haden Richardson.
An improvement in the conversion of iron into blooms.	3352	26th Nov. 1867	Edward Hammond Bentall.
Means of and apparatus for treating metals and minerals in order to produce their oxides or other chemical or mechanical combinations, and to separate metals from their ores or from their alloys. (*Communicated by Zabdiel Adams Willard and William Gardner Adams.*)	3360	27th Nov. 1867	Henry Francis Gardner.
Improvements in machinery or apparatus for grinding bones, ores and other substances, a part of which improvements is applicable to footstep bearings generally. (*Communicated by Edwin Pugh Baugh.*)	3393	29th Nov. 1867	John Henry Johnson.
Certain improvements in the manufacture of cast steel and homogeneous iron.	3440	3rd Dec. 1867	John Gjers.
Manufacture of malleable metal of a steely quality, partly from Bessemer "scrap" or other Bessemer metal - - - - -	3463	5th Dec. 1867	Stanhope Perkins. William Smellie.
Improvements in annealing furnaces and in apparatus to be employed therein, parts of which improvements may be applied to certain other descriptions of furnaces and fires - -	3467	5th Dec. 1867	Matthew Tildesley. James Bird.
Improvements in furnaces and in effecting the combustion of fuel therein.	3468	5th Dec. 1867	Thomas Joseph Leigh.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
METALS (*Smelting*)—*continued.*			
An improved material or composition to be employed for covering or coating the interior surfaces of moulds, crucibles or ducts, previous to their receiving the molten metal in the process of casting and for other purposes. (*or tapping cupolas.*)	3474	6th Dec. 1867	James Durrans.
Improvements in the treatment and reduction of titaniferous iron ores and in the manufacture of iron, and in the construction of furnaces to be employed therein - - - -	3502	9th Dec. 1867	Charles Martin. William Barrett. Thomas Stammers Webb.
An improved process for the reduction of tin so as to render it applicable for coating metals and for other purposes. (*Communicated by Jules Feuquières.*)	3517	11th Dec. 1867	Alexander Melville Clark.
Water tuyeres for blast furnaces, smiths' fires and for other like purposes.	3529	12th Dec. 1867	Rowland William Brownhill.
An improved method of manufacturing cast steel and malleable iron. (*Communicated by Edward Louis Seymour.*)	3537	12th Dec. 1867	Alfred Vincent Newton.
Treatment of gutta-percha, indian-rubber, Honduras gum, and the other allied gums, for the production of a preparation or preparations applicable as a varnish, cement, paint, stain, water and air-proof material, solid or elastic material and for other purposes. (*substitute for metals.*) (*Communicated by Daniel Reed.*)	3542	13th Dec. 1867	Edward Reed Sintzenich.
A self-acting metal breaker - - -	3555	14th Dec. 1867	Francis Berry.
An improved apparatus to be employed in the manufacture of iron and steel.	3614	19th Dec. 1867	William Haden Richardson.
Improvements relating to blast and cupola furnaces - - - - - -	3663	24th Dec. 1867	James Addie. Ferdinand Kohn.
Improvements in the manufacture of iron and steel, and in furnaces and apparatus used in the said manufacture - - - -	3667	24th Dec. 1867	George James Hinde. Thomas Callender Hinde.
Furnaces - - - - -	3695	28th Dec. 1867	John Jowett.
Improvements in the process of and apparatus for producing heat by the combustion of fuel, for metallurgical and other operations where heat is required, and in the means for utilizing the waste heat from blast furnaces.	3698	30th Dec. 1867	Richard Fothergill.
Mode of and apparatus for combining the vapours of liquid hydrocarbons with oxygen and hydrogen, and burning the mixture as fuel. (*for smelting.*) (*Communicated by David Oliver Macomber.*)	3706	31st Dec. 1867	Marc Antoine François Mennons.
Improvements in the treatment of crude or cast iron, and in the manufacture of malleable iron and steel.	3714	31st Dec. 1867	Henry Bessemer.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
II.—Casting and Moulding Metals; Moulds and Core-boxes.			
Improvements in the means of and apparatus for lighting railway carriages, parts of which improvements are also applicable for other purposes. (*moulds for casting taps.*)	58	9th Jan. 1867	William Thomas Sugg.
An improvement in the manufacture of cast steel -	88	14th Jan. 1867	Robert Mushet.
Improvements in pipe moulding and casting apparatus, and in black washing the moulds. (*Communicated by George Ross.*)	99	14th Jan. 1867	William Clark.
Improvements in making moulds for casting fenders and in fitting bottoms to fenders, which improvements in making moulds for casting fenders may also be applied to the making of moulds for casting other articles - - - - -	139	19th Jan. 1867	James Bate. George Asher.
Improvements in constructing and applying defensive armour and also bullet-proof porthole covers for the defence of ships and other vessels, forts, batteries and other fortifications, parts of which improvements are applicable to other purposes.	193	25th Jan. 1867	Thomas Berney.
Improvements in the manufacture of cores for the sockets of metal pipes, and in apparatus employed therein - - - - -	209	26th Jan. 1867	Matthew Hodgson Lishman. Edward Chambers.
An improved method of casting articles in iron and steel. (*Communicated by Nicolas Pooteeloff.*)	244	29th Jan. 1867	William Edward Newton.
Manufacture of iron and steel - - - (*casting ingots.*)	546	27th Feb. 1867	Alexander Lyman Holley.
Construction of wheel moulding machines -	715	13th March 1867	Joseph Willcock. Samuel Mason, jun^{r}.
Core bars and studs to be used for casting iron pipes and similar articles.	813	21st March 1867	David Yoolow Stewart.
Improvements in the casting of Bessemer or crucible steel hoops for the tyres of railway wheels, such improvements being applicable for casting cylindrical forms in Bessemer or crucible steel for other purposes - - - -	911	28th March 1867	David Foster. Rupert Cooke.
Improvements in fire-bars, and in the manufacture of the iron to be used in the construction thereof, the iron so manufactured being applicable also to other purposes.	1070	10th April 1867	William Colborne Cambridge.
Certain improvements in the means of casting or producing parts of steam, gas and water fittings, as also parts of lamps and other articles.	1355	8th May 1867	Charles Layton.
Treating iron to obtain metallic compounds for various uses. (*for metallic castings.*)	1461	17th May 1867	Andrew Linmere Dowie.
Casting Bessemer metal, steel and other metals -	1606	30th May 1867	James Astbury.
Certain improvements in moulds to be employed in casting Bessemer steel and other metals -	1643	4th June 1867	Joseph Waddington. Benjamin Longbottom.
Manufacture of type for printing - - (*Communicated by Eduard Heinrich Mayer.*)	1722	12th June 1867	John Frederick Boëtius. Jacob Eichhorn.
Manufacture of dies for stamping - - (*casting.*)	1818	21st June 1867	William Price.
Certain improvements in casting ingots of Bessemer or other steel.	1833	24th June 1867	John Birch.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
METALS (*Casting*)—*continued.*			
Manufacture of hollow vessels, and dished, sunken or tubular shapes or forms in metal or other material capable of being moulded	1851	25th June 1867	William Thomas Watts. Daniel Joseph Fleetwood.
Utilization of a certain waste material obtained in the manufacture of hydrocarbon liquids. (*for lining moulds.*)	1888	28th June 1867	John Carrington Sellars.
Casting of hollow and other fire-bars	2042	12th July 1867	James Nelson.
Casting of ingots	2161	25th July 1867	Alexander Wilson.
Manufacture of cast steel and its derivatives (*see* "METALS, SMELTING.") (*Communicated by Emile Martin and Pierre Emile Martin.*)	2166	25th July 1867	Clinton Edgcumbe Brooman.
Manufacture and treatment of certain kinds of iron	2185	27th July 1867	John Wood.
Treating cast iron	2282	7th Aug. 1867	Erasmus Thomas Horsley.
Apparatus for preparing moulds for the casting of pipes, cylinders, pillars, rollers and other forms	2286	8th Aug. 1867	Charles Benson. Joseph Barker.
Improvements in the construction of moulds for casting aluminium and other metal plates for artificial teeth, also in the method of casting said plates and securing the teeth therein, and in apparatus connected therewith, part of which improvements is applicable for producing other fine metal castings. (*Communicated by James Baxter Bean.*)	2368	17th Aug. 1867	Alexander Melville Clark.
Manufacture of iron and steel (*Communicated by Alexander Lyman Holley.*)	2438	27th Aug. 1867	George Haseltine.
Improvements in the manufacture of malleable iron, cast iron and steel, and in the construction of furnaces to be employed for such purposes.	2484	2nd Sept. 1867	Charles Gelstharp.
A new or improved metal founders' blacking	2505	4th Sept. 1867	Frederick Hope Pattison. James William Henry Pattison.
Construction of cores used in casting metallic pipes or tubes of a curved or cyphon form	2601	14th Sept. 1867	Joshua Antil. George Grimes. Henry Charles Tunks.
Manufacture of moulders' blackening	2711	26th Sept. 1867	Robert Wilson Bennie.
Production of a glazed or vitrified surface on cast iron or other cast metal	2717	26th Sept. 1867	Erasmus Thomas Horsley. Charles Horsley.
Machinery or apparatus for moulding metal	2813	7th Oct. 1867	Joseph Smith.
Manufacture and refining of iron and steel	2832	8th Oct. 1867	John Player.
Improvements in casting metals, glass and other materials, and in apparatus employed for this purpose.	2912	17th Oct. 1867	Jacques Rives.
Manufacture of smiths' anvils	2924	18th Oct. 1867	Henry Sharp. Francis William Webb.
Improvements in ceiling cornices and centres, and other indoor ornaments of a similar nature, and in the mode of fixing the same.	2938	19th Oct. 1867	Francis William Waide.
Steam governors and valves (*Communicated by Francis Johnston Nutz, Philip Estes De Forrest Fairchild and Edward Payson Willson.*)	2980	23rd Oct. 1867	Alexander Melville Clark.
Making moulds for the manufacture of metallic screws.	3038	28th Oct. 1867	William Potts.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
METALS (*Casting*)—*continued.*			
Certain improvements in the method of casting, forming or producing toothed wheels or gearing to be employed in machinery for preparing, spinning and twisting cotton or other fibrous substances - - - -	3063	31st Oct. 1867	William Hall. John Wren. James Brandwood.
Improvements in or applicable to that apparatus known as "Giffard's injector," and in the method of and machinery or tools for making the same. (*casting nozzles.*)	3169	9th Nov. 1867	James Gresham.
Manufacture of wheels for railway carriages and other rolling stock.	3274	19th Nov. 1867	Edward Reynolds.
Machinery for producing seamless tubes - - (*Communicated by William Forman Brooks.*)	3333	25th Nov. 1867	Thomas Chalmers.
Improvements in the manufacture of cutting tools and in the construction of tool holders.	3339	26th Nov. 1867	John Paterson Smith.
Permanent way of railways - - -	3362	27th Nov. 1867	James McFarlane. George Barker.
Certain improvements in moulds for casting Bessemer steel and other metals.	3400	30th Nov. 1867	Richard McClure.
An improvement in the manufacture of bells -	3416	2nd Dec. 1867	Charles Hargrove. Samuel Hargrove, junior.
An improved material or composition to be employed for covering or coating the interior surfaces of moulds, crucibles or ducts, previous to their receiving the molten metal in the process of casting and for other purposes.	3473	6th Dec. 1867	James Durrans.
Improvements in ordnance and in projectiles used therewith, as also in the processes employed in their manufacture.	3507	10th Dec. 1867	William Palliser.
Presses for stamping or endorsing - - (*moulding the type wheels.*) (*Communicated by Edouard Cornèlis.*)	3516	11th Dec. 1867	Alexander Melville Clark.
Improvements in moulding and in the machinery or apparatus employed therefor - -	3585	17th Dec. 1867	William Simons. Archibald Carmichael.
An improved method of and apparatus for the manufacture of tinned leaden pipes. (*Communicated by Augustin Henry Hamon.*)	3591	17th Dec. 1867	William Edward Newton.
Moulds or apparatus to be used in casting steel -	3677	27th Dec. 1867	John Martin Rowan.
III.—Forging, Rolling, Hammering, Rivetting, Bending, Welding and Shaping Metals; Steam Hammers, Anvils.			
An improved composition to be employed in welding or soldering iron upon iron, steel upon steel, and iron upon steel.	128	18th Jan. 1867	Bernard Lietar.
Improvements in rolling and shaping metals, and in the machinery or apparatus employed therein.	196	25th Jan. 1867	William Gray.
Improvements in manufacturing metallic hoops for casks or other wooden vessels or utensils, and in machinery therefor. (*rolling hoop iron.*)	223	28th Jan. 1867	John Poole.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
METALS (*Forging*)—*continued.*			
An improved machine for manufacturing eyelets -	260	30th Jan. 1867	William Rodolphus Landfear.
Breaks and apparatus for giving motion to machinery. (*rolling mills.*)	299	2nd Feb. 1867	Robert David Napier.
Machinery and apparatus for supporting, moving and forging heavy masses of metal.	342	7th Feb. 1867	John Ramsbottom.
Hammers to be worked by steam or other fluid -	440	18th Feb. 1867	Robinson Thwaites. Edward Hamer Carbutt. John Sturgeon.
Uniting iron and steel in sheets, plates, rails, bars, rods, links, bands, hoops, tubes or other forms, applicable to navigable vessels, forts, bridges, roofs, floors, tanks or chests.	469	21st Feb. 1867	William Bridges Adams.
Manufacture of steel caps for spinning and other purposes - - - - - -	500	23rd Feb. 1867	William Deakin. John Bagnall Johnson.
An improved lubricator or tallow cup - - (*for steam hammers.*)	507	23rd Feb. 1867	John Bates.
Machinery for mining, cutting or working coal and other minerals, and for hammering metals and crushing minerals.	535	27th Feb. 1867	Andrew Howat.
Steam hammers - - - - - - (*Communicated by William Sellers and Coleman Sellers.*)	644	7th March 1867	William Edward Newton.
A new or improved spring shank applicable to boots and shoes, and in the machinery employed therein - - - - - -	782	18th March 1867	Alvin Wales Moore. Elias McNeal.
Improvements in machinery or apparatus for rolling spikes, nails, bolts or other similar articles, from rods, sheets or bars of iron or other metal or malleable substances, and in preparing, shaping, slitting and manufacturing same, and for the construction of furnaces for heating iron or for other similar purposes.	840	22nd March 1867	Samuel Sedgwick.
Manufacture of ships' sheathing, armour sheathing and fastenings.	856	23rd March 1867	Joseph Betteley.
Improvements in metal ties or bands for securing bales of cotton or other substance, and in machinery employed in the manufacture of the same. (*apparatus for bending the hoops.*)	858	25th March 1867	Henry Tassman.
Improvements in bending and circling metallic plates, and in machinery or apparatus employed therefor.	949	30th March 1867	John Fleming.
An improvement in the manufacture of railway crossings.	1012	4th April 1867	Stanhope Perkins.
Machinery for the manufacture and treatment of wire.	1049	8th April 1867	William Thomas Henley.
Armour plating and sheathing of ships of war and fortifications.	1082	11th April 1867	Theodore Anthony Rochussen.
Machinery for rolling iron and steel - - -	1095	12th April 1867	Thomas Howard Head.
Rolling hoop iron - - - - -	1249	30th April 1867	Eli Deeley.
A novel flux applicable to welding, brazing and puddling purposes. (*Communicated by Anthony Hindermyer.*)	1264	1st May 1867	John Henry Johnson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
METALS (*Forging*)—*continued.*			
Improvements in the construction of landing stages and iron ships or vessels, also in propelling and steering ships or vessels generally. (*making iron armour plates.*)	1309	4th May 1867	Evan Leigh.
Certain improvements in the manufacture of plantation and other hoes, and which said improvements are also applicable to the manufacture of other implements and tools - - -	1354	8th May 1867	James Fairley. Alfred Fairley.
Welding of iron and steel, and the flux used therefor. (*Communicated by John P. Price and Frank H. Hipple.*)	1377	9th May 1867	William Edward Newton.
Valves for steam and other fluids - - (*for steam hammers.*)	1384	10th May 1867	William Bracewell. William Pickup. Benjamin Lund.
An improved machine for flattening hackle pins or comb teeth employed in machines for combing wool or other fibrous substances.	1435	15th May 1867	Charles Perry.
Improvements in producing and increasing combustion in blast and other furnaces, also for generating steam and for other similar or analagous purposes. (*smiths' forges.*)	1454	16th May 1867	John Martin Stanley.
Doors and door frames of furnaces - - (*forge furnaces.*)	1574	28th May 1867	William Coulson.
A new or improved engine or machine for obtaining and applying motive-power. (*applicable as steam hammers.*)	1604	30th May 1867	James Francombe.
Certain improvements in furnaces and in apparatus to be employed in the construction of steam boilers. (*bending metal plates; rivetting.*)	1650	5th June 1867	David Hanson.
Improvements in rolling and shaping metals, and in the machinery or apparatus employed therein. (*Communicated by Hippolyte Ulysse Petin and Jean Marie Gaudet.*)	1714	11th June 1867	John Henry Johnson.
Improvements in the construction and manufacture of iron or metal rail rods or bars for balconies, gates, railings, pillars, standards or columns and other useful purposes, and also in the machinery employed therein.	1739	14th June 1867	Stephen Tuddenham.
Construction of heating and annealing furnaces - (*Communicated by the Union Car Spring Manufacturing Company.*)	1784	18th June 1867	William Sparks Thomson.
Manufacture of hollow vessels, and dished, sunken or tubular shapes or forms in metal or other material capable of being moulded - -	1851	25th June 1867	William Thomas Watts. Daniel Joseph Fleetwood.
Tuyeres for smiths' hearths - - -	1876	27th June 1867	Moses Horrocks Taylor.
Improvements in the manufacture of welded tubes and in apparatus employed for that purpose, which latter are partly applicable to other purposes - - - - - -	1937	3rd July 1867	William Galloway. George Plant.
Improvements in steam and other hammers whereby to effect economy in the use of the steam or other fluid actuating said hammers.	1944	3rd July 1867	David Davy.
Machinery for manufacturing metal tubes - - (*Communicated by Charles Granville Smith.*)	1973	5th July 1867	William Robert Lake.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
METALS (*Forging*)—*continued.*			
An improvement in the manufacture of tyres for railway wheels.	1981	6th July 1867	Henry Brook Woodcock.
Improvements in the manufacture of cylindrical metallic cases and in the machinery or apparatus employed therefor - - - - (*bending plates.*)	2033	11th July 1867	John Sharp Henderson. John Macintosh.
Improvements in apparatus for bending bars and plates of metal, and in the converting for purposes of this invention of apparatus already in use.	2063	13th July 1867	Thomas Berney.
Machinery for bending, straightening and punching rods, bars and other articles of metal - -	2105	18th July 1867	William Barningham. John Thompson.
Forge hammers - - - -	2240	2nd Aug. 1867	William Horton.
An improved system of flattening and straightening saws and similar plates or blades of steel during the process of hardening.	2248	3rd Aug. 1867	John Russell.
Uniting and treating iron, steel and other metals in sheets, plates, rails, bars, rods, links, bands, hoops, tubes or other formes, applicable to navigable vessels, forts, guns, bridges, roofs, floors, boilers, heaters, tanks, chests or like structures.	2376	19th Aug. 1867	William Bridges Adams.
Construction of safes for containing articles of value.	2382	19th Aug. 1867	Edward Alfred Cowper.
Anvils - - - - - (*Communicated by James Ezekiel Emerson.*)	2578	11th Sept. 1867	William Edward Newton.
Machinery for rolling hoops, strips, angle bars and other bars of iron and steel - - - -	2588	12th Sept. 1867	William Brown.
Machinery for rolling bars, rods and plates of iron and steel, and other metals of varying thicknesses or of irregular figures.	2635	19th Sept. 1867	William Molineaux.
Steam or other power hammers - - -	2676	23rd Sept. 1867	James Fletcher the younger.
Manufacture of cranked axles, cranked shafts, and other heavy forgings - - -	2693	25th Sept. 1867	Robert Wilson. John Nuttall.
Manufacture of strip or sheet iron for certain purposes.	2768	2nd Oct. 1867	Richard Hobbs Taunton.
Improvements in the manufacture of rails, bars and other articles of iron, and in the apparatus employed therefor - - -	2839	9th Oct. 1867	John James. Thomas Jones.
An improved mode of preparing iron for the manufacture of various articles where great strength and capability of resistance to tensile strain or torsion is required. (*Communicated by Michel Pawlowitch Lwoff.*)	2865	11th Oct. 1867	William Edward Newton.
An improvement in the rolling of hoop or strip iron for brewers' or other hoops.	2866	11th Oct. 1867	William Butler.
Manufacture of smiths' anvils - - -	2924	18th Oct. 1867	Henry Sharp. Francis William Webb.
Manufacture of hoes - - - -	2945	19th Oct. 1867	Francis Adkins.
Improvements in the manufacture of file blanks and in the machinery or apparatus employed therein.	2972	22nd Oct. 1867	William Gray.
Improvements in plating or protecting ships of war, fortifications and other like structures, and the manufacture of the plates employed therefor.	3003	25th Oct. 1867	Gustave Julius Günther.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
METALS (*Forging*)—*continued.*			
Manufacture of armour plates - - -	3019	26th Oct. 1867	Francis Montagu Smith.
Manufacture of spoons, forks and ladles - -	3037	28th Oct. 1867	Thomas Bennett.
Improved machinery for rolling iron into bars, strips and sheets.	3184	11th Nov. 1867	Thomas Jones Leonard.
Defensive armour for war vessels and forts - (*Communicated by Obadiah Marland.*)	3185	11th Nov. 1867	William Robert Lake.
Improved apparatus for feeding metal plates to rolls.	3218	13th Nov. 1867	Edward Madge.
Manufacture of railway rails - - -	3325	25th Nov. 1867	Milton Alexander Hamilton.
Machinery for producing seamless tubes - - (*cross rolling.*) (*Communicated by William Forman Brooks.*)	3333	25th Nov. 1867	Thomas Chalmers.
Construction or arrangement of piles or fagots for wrought-iron beams, girders or bars of different forms. (*Communicated by George Walters and Thomas Shaffer.*)	3355	27th Nov. 1867	John Henry Johnson.
Manufacture of the tyres of railway and other wheels - - - - -	3356	27th Nov. 1867	William Fowler. John Griffiths.
Machinery and apparatus for heating and forming metals for railway wheel tyres.	3482	7th Dec. 1867	Paul Rapsey Hodge.
An improvement in machinery for corrugating sheets of metal.	3511	11th Dec. 1867	John Woolfield.
Manufacturing iron and steel chains without welding - - - - -	3515	11th Dec. 1867	Alphonse Camme. Ferdinand Delpetch.
Water tuyeres for blast furnaces, smiths' fires and for other like purposes.	3529	12th Dec. 1867	Rowland William Brownhill.
A self-acting metal breaker - - -	3555	14th Dec. 1867	Francis Berry.
Machinery for the manufacture of cartridge cases (*rivetting.*)	3636	21st Dec. 1867	Edwin Ludlow. Alfred Ludlow.
Improvements in the process of and apparatus for producing heat by the combustion of fuel, for metallurgical and other operations where heat is required, and in the means for utilizing the waste heat from blast furnaces. (*applying heat to reverberatory furnaces.*)	3698	30th Dec. 1867	Richard Fothergill.
See also "NAILS."			
IV.—Cutting, Planing, Punching Boring and Rifling Metals.			
Improvements in planing machines, which improvements are also applicable to other machines and engines in which sliding surfaces are employed.	2	1st Jan. 1867	William Muir.
An improved bench planing machine - - (*Communicated by Joseph Jones.*)	3	1st Jan. 1867	Andrew Dwight Campbell.
Improvements in apparatus used for boring and tapping gas and water mains, and in fitting service pipes or cocks thereto.	145	19th Jan. 1867	Alfred Upward.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
METALS (*Cutting*)—*continued.*			
Improvements in machine tools for manufacturing parts of locomotive engines, parts of which improvements are also applicable to other similar or analogous purposes. (*drilling railway wheel tire.*)	334	6th Feb. 1867	Stephen Alley.
Drilling machines - - - -	338	6th Feb. 1867	Andrew Betts Brown.
Machinery and apparatus for supporting, moving and forging heavy masses of metal.	342	7th Feb. 1867	John Ramsbottom.
Machinery or apparatus for boring and planing metals.	361	8th Feb. 1867	Henry Allason Fletcher.
Machinery for cutting and polishing metals -	410	14th Feb. 1867	John Thompson.
Machines for punching iron or other metal plates -	438	16th Feb. 1867	Richard Hodson.
Manufacture of metallic rollers used in preparing or treating cotton and other fibrous substances. (*fluting.*)	666	8th March 1867	Joshua Horton the younger.
A new or improved spring shank applicable to boots and shoes, and in the machinery employed therein - - - - - (*punching.*)	782	18th March 1867	Alvin Wales Moore. Elias M^c^Neal.
Nut tapping machine - - - -	847	23rd March 1867	Emile Watteeu.
Improvements in applying and fitting the tubes of multitubular boilers, condensers and other like capacities, and in apparatus for the same. (*boring the plates.*) (*Communicated by Victor Langlois.*)	983	2nd April 1867	William Clark.
Needles and other similar articles - - (*drilling.*)	999	3rd April 1867	John William Scott.
Improved machinery for piercing and drilling tangs and scales for table knives and forks, table and butchers' steels, and butchers' knives	1359	8th May 1867	Joseph Nixon. Jabez Winterbottom.
Improvements in boring gun barrels and ordnance, and in apparatus used therein. (*Communicated by Joseph Jaspard.*)	1400	11th May 1867	John Piddington.
Boring metals in the solid - - -	1550	24th May 1867	Thomas Greenwood.
Drilling machines and hoisting machines - -	1753	15th June 1867	George Allix.
Improvements in guns, projectiles and cartridges, and in the construction of the same. (*rifling guns.*)	1757	15th June 1867	George Clark.
Improved apparatus for boring or perforating rocks, metals or other substances. (*Communicated by Horric de la Roche Tolay.*)	2027	10th July 1867	William Edward Newton.
New or improved machinery to be employed in the manufacture of watches and chronometers. (*drilling.*)	2032	11th July 1867	Joseph Boyes Fraser.
Machinery for bending, straightening and punching rods, bars and other articles of metal -	2105	18th July 1867	William Barningham. John Thompson.
Machinery for the manufacture of cut nails - (*Communicated by John Henry Geary.*)	2296	9th Aug. 1867	Richard Heathfield.
Improved apparatus for cutting or forming metal joints.	2406	22nd Aug. 1867	William Newsome.
Improvements in and applicable to hydraulic and other presses, parts of which improvements may be employed for or with other descriptions of machinery - - - - (*shearing.*)	2454	28th Aug. 1867	William Thomas Watts. Daniel Joseph Fleetwood.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
METALS (*Cutting*)—*continued.*			
An improved mode of cutting up iron and steel rails and rail ends in order to utilize them -	2463	29th Aug. 1867	John Dyson. George Walter Dyson. Stephen Martin.
Improved machinery for cutting, carving and engraving upon ivory, wood, stone, metals and other substances. (*Communicated by Isaac Hall.*)	2497	3rd Sept. 1867	Alexander Melville Clark.
Anvils - - - - - - (*with shears or punch.*) (*Communicated by James Ezekiel Emerson.*)	2578	11th Sept. 1867	William Edward Newton.
Means or apparatus employed in drilling, surfacing, cutting and ornamenting metal, wood and other substances.	2732	27th Sept. 1867	Frank Branscombe.
Machinery for the manufacture of cut nails - (*Communicated by Cyrus Dexter Hunt.*)	3246	15th Nov. 1867	Richard Heathfield.
Merchants' ships and other vessels and appliances connected therewith. (*drilling and rivetting plates.*)	3331	25th Nov. 1867	George Bell Galloway.
Improvements in the manufacture of cutting tools and in the construction of tool holders. (*for boring and planing machines.*)	3339	26th Nov. 1867	John Paterson Smith.
Improvements in ordnance and in projectiles used therewith, as also in the processes employed in their manufacture. (*rifling guns.*)	3507	10th Dec. 1867	William Palliser.
Improvements in guns, projectiles and cartridges, and in the construction of the same. (*rifling guns.*)	3562	14th Dec. 1867	George Clark.
An improved mode of reducing the friction of revolving and sliding surfaces. (*tables of shaping machines.*)	3628	21st Dec. 1867	Edward Lord.
Machinery for the manufacture of cartridge cases (*piercing.*)	3636	21st Dec. 1867	Edwin Ludlow. Alfred Ludlow.
Construction of cannon and other fire-arms -	3642	23rd Dec. 1867	Charles William Lancaster.
Machinery for cutting and heading nails - -	3651	23rd Dec. 1867	Matthew James Rice.
An universal machine for manufacturing circular cutters and milling tools of any form or outline, with either a rectangular or a helicoidal direction of cut.	3655	24th Dec. 1867	Paul François Tranchat.
V.—Plating and Coating Metallic Surfaces with Metal; Finishing and Ornamenting Metallic Surfaces.			
An improved process of making foil of lead coated with tin. (*Communicated by William Woodman Huse.*)	323	5th Feb. 1867	Alfred Vincent Newton.
Machinery for cutting and polishing metals -	410	14th Feb. 1867	John Thompson.
An improved machine for cleaning and polishing the surface of glass, marble, metal and other smooth surfaces.	462	20th Feb. 1867	Robert Kunstmann.
An improved mode of and means for producing pictures, designs, letters, and other characters or figures upon glass, metal, wood and other materials.	732	13th March 1867	Edward Lee.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
METALS (*Plating*)—*continued.*			
Improvements in coating metals and in apparatus employed therein and for like purposes.	810	20th March 1867	Gustav Bischof, junior.
Decoration or ornamentation of metals - - (*Communicated by Charles Besançon.*)	932	29th March 1867	George Davies.
Improved means of producing surfaces in relief or in intaglio for printing and other purposes. (*by galvano-plasty.*) (*Communicated by André Adolphe Disderi.*)	938	1st April 1867	Clinton Edgcumbe Brooman.
A new method of bronzing metallic and other surfaces - - - - - -	979	2nd April 1867	Joseph Storey. William Edward Bickerdike. William Virgo Wilson.
Machinery for grinding and polishing metal and other surfaces.	1105	13th April 1867	William Gregory.
Improvements in obtaining useful products from certain materials produced in the process of galvanizing or coating iron with zinc.	1107	13th April 1867	Charles Crockford.
Improvements in apparatus for applying concentrated heat, and suitable for lighting fires, brazing and similar uses.	1149	20th April 1867	John McKechnie.
An improved method of and apparatus for galvanizing or tinning and zinking iron wire and other description of iron. (*Communicated by Emile Delacroix.*)	1169	22nd April 1867	William Edward Gedge.
Coating and ornamenting metallic or other surfaces (*Communicated by Edouard Dodé.*)	1342	7th May 1867	John Bennington Blythe.
Improvements in gas blow pipes and in blow pipe torches or flames. (*for soldering.*)	1530	23rd May 1867	Frederick Hardwick Johnson.
Improvements in guns, projectiles and cartridges, and in the construction of the same. (*covering projectiles with softer metal.*)	1757	15th June 1867	George Clark.
Preserving iron from oxidation - - - (*Communicated by Monsieur Alfred Delcelier.*)	2142	23rd July 1867	Hector Auguste Dufrené.
Table knives and forks - - - - (*soldering bolsters to the blades.*) (*Communicated by Frederick Jeremiah Miller.*)	2295	9th Aug. 1867	William John Miller.
Mode of covering and protecting iron plates from the action of sea-water.	2413	22nd Aug. 1867	John McIntyre.
A new method of bronzing metallic and other surfaces - - - - - -	2453	28th Aug. 1867	Joseph Storey. William Edward Bickerdike. William Virgo Wilson.
Apparatus for applying concentrated heat, and suitable for lighting fires, brazing and similar uses.	2491	3rd Sept. 1867	John McKechnie.
An improved mode of covering steel or iron plates with copper, and manner of arranging or disposing such plates. (*Communicated by Edwin Turner Ligon and Thomas Jackson Foster.*)	3107	4th Nov. 1867	William Edward Newton.
Means and apparatus for covering wire with metal or other material.	3157	8th Nov. 1867	George West Royston Pigott.
Manufacture of compound metallic plates - -	3205	12th Nov. 1867	James Humby.
Machinery for producing seamless tubes - - (*smoothing the surface.*) (*Communicated by William Forman Brooks.*)	3333	25th Nov. 1867	Thomas Chalmers.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
METALS (*Plating*)—*continued.*			
An improved mode of coating and uniting metals with metals.	3340	26th Nov. 1867	John Paterson Smith.
Manufacture of hollow metallic seamless spheres and ornaments - - - - -	3479	6th Dec. 1867	Richard Jones. John Abrahall.
An improved process for the reduction of tin so as to render it applicable for coating metals and for other purposes. (*Communicated by Jules Fenquiéres.*)	3517	11th Dec. 1867	Alexander Melville Clark.
Improvements in guns, projectiles and cartridges, and in the construction of the same. (*coating projectiles with softer metal.*)	3562	14th Dec. 1867	George Clark.
An improved method of and apparatus for the manufacture of tinned leaden pipes. (*Communicated by Augustin Henry Hamon.*)	3591	17th Dec. 1867	William Edward Newton.
METERS FOR GAS AND FLUIDS.			
Certain improvements in meters for gas and liquids, such improved meters being also applicable as a motive-power. (*Communicated by Homer H. Stuart.*)	109	16th Jan. 1867	John Colvill.
Improved apparatus for supplying steam-boilers with water and indicating the quantity supplied. (*Communicated by Adrien Houget, Emile Bede and Laurent Roufosse.*)	243	29th Jan. 1867	William Edward Newton.
An improved construction of water meter - - (*Communicated by Robert Westcott and Job Symmes Crane.*)	429	15th Feb. 1867	Alfred Vincent Newton.
Gas meters - - - - - -	449	19th Feb. 1867	Henry Alder.
Apparatus for measuring water, alcohol and other fluids. (*Partly communicated by Dr. Werner Siemens.*)	631	7th March 1867	Charles William Siemens.
Apparatus for measuring the passage or flow of liquids - - - - -	720	13th March 1867	Thomas Walker. Thomas Ferdinand Walker.
A counting and controlling cock for liquids	928	29th March 1867	Eugéne Canton.
An improved combined water-meter and force pump. (*Communicated by Elihu Spencer and Thomas Stephens.*)	1045	6th April 1867	William Robert Lake.
Machinery or apparatus for measuring fluids -	1071	11th April 1867	Francis George Fleury.
Improvements in distributing and measuring gas, steam, water and other fluids, and in the apparatus or means employed therein.	1158	20th April 1867	Richard Hastings Frith.
Indicating measure taps for drawing off liquids -	1248	30th April 1867	Robert Wood Ridley. John Withers.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
METERS—*continued.*			
Construction of turbines and other hydraulic engines or apparatus for obtaining motive-power, and for measuring the flow of fluids - -	1300	3rd May 1867	John Ramsbottom. Thomas Massey Pearce.
Improvements in meters for measuring the flow of water and other fluids, which improvements are applicable also in the construction of pumps for air, water and other fluids. (*Communicated by Heinrich Wilhelm Schneider.*)	1303	3rd May 1867	Charles Bosch Reitz.
Improvements in apparatus for measuring fluids, which improvements are also applicable for obtaining motive-power and for pumping -	1561	27th May 1867	Herbert Frost, senior. Herbert Frost, junior.
Instruments or apparatus for measuring spirits and other liquids. (*see* "MEASURING.")	1591	29th May 1867	James Martin French.
Apparatus for registering and recording the quality of gas. (*see* "THERMOMETERS.") (*Communicated by Christopher Friedleben.*)	1684	7th June 1867	James Warburton.
An improved water and gas meter - - (*Communicated by Joshua Mason.*)	2179	27th July 1867	William Edward Newton.
Indexes or tell-tales applicable to fluid meters and other counting or measuring apparatus.	2371	17th Aug. 1867	William Willmer Pocock.
Improvements in apparatus for raising, supplying and measuring water to steam-boilers, part of which invention is also applicable to measuring water for other purposes.	2422	23rd Aug. 1867	John Varley.
An improved rotary steam or gas engine, also applicable for pumping and measuring liquids.	2536	7th Sept. 1867	Emile Hubner.
Water meters - - - - -	2700	25th Sept. 1867	George Clayton. William Marbeck.
Improvements in actuating the valves of water and other meters, and of engines for obtaining motive-power.	3050	29th Oct. 1867	Loftus Perkins.
Improvements in rotary engines applicable as motors, pumps, meters and for other purposes, also in indicators applicable to such and other engines or meters and other purposes. (*Communicated by Arthur Perry Emery.*)	3219	13th Nov. 1867	Alfred Vincent Newton.
Water-meters and water-power engines - -	3369	28th Nov. 1867	Matthew Henry Larmuth. Luke Hamilton Larmuth.
Liquid meters or apparatus for measuring and registering the volume of water or other liquid flowing under pressure through pipes or ducts.	3587	17th Dec. 1867	Ernest Marie Du Boys.
Faucets and apparatus for measuring liquids - (*Communicated by Arthur Gates Wilson.*)	3624	20th Dec. 1867	Levi Lincoln Tower.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
MINING; BORING AND BLASTING ROCK; RAISING FROM MINES, GETTING COALS; DRAINING, LIGHTING AND VENTILATING MINES; SINKING WELLS.			
Means of saving life in pits and mines - -	40	7th Jan. 1867	Charles James Pownall.
Improvements in engines for boring and working rock and other material, and in stands for such engines, the improvements in engines being partly applicable to other purposes.	43	7th Jan. 1867	Frederick Bernard Dœring.
Means and apparatus for ventilating mines -	117	17th Jan. 1867	Robert James.
A new and improved fastener or lock to be employed for securing the cover enclosing the flame in lamps known as the "Davy," or lamps of a similar description.	137	19th Jan. 1867	John Harding.
Construction of water wells - - -	233	29th Jan. 1867	Alphonse Donnet.
Certain improvements in the ventilation of mines -	235	29th Jan. 1867	John Hopkinson.
Improvements in the lighting of mines, sewers and other similar subterraneous places in which inflammable and explosive gases may form and collect, and in the lamps or lanterns and other apparatus to be used therewith.	252	30th Jan. 1867	Henry Richardson Fanshawe.
Improvements in engines or machinery for boring or working rock and other material, and in stands for such engines.	296	2nd Feb. 1867	Edward Smith Crease.
An improved arrangement of mechanism or apparatus to be employed for undermining, "holeing" and cutting coal.	457	20th Feb. 1867	John Scarisbrick Walker.
Apparatus for counterbalancing pump rods, changing the lines or angles of reciprocatory motions, and transferring power and motion from one point to another - - - - -	485	22nd Feb. 1867	William West. John Darlington.
Certain improvements in lamps - - - (*miners' lamps.*)	525	26th Feb. 1867	George Young.
Machinery for mining, cutting or working coal and other minerals, and for hammering metals and crushing minerals.	535	27th Feb. 1867	Andrew Howat.
Means of ventilating pits and mines - -	552	28th Feb. 1867	Charles James Pownall.
Destroying explosive gases in coal and other mines, in order to render them safe for the miners to enter - - - - - -	565	28th Feb. 1867	James Harbert. Frederick Goodman.
A compound safety disengaging hook - - (*for coal mines.*)	573	1st March 1867	Jubal Charlton Broadbent.
Process and apparatas for perforating tunnels and galleries of mines of great length, through rocks, much quicker than by the process hitherto employed.	575	1st March 1867	Theophilus Berrens.
Hydro-carbon oils used for safety and other lamps (*miners' lamps.*)	611	5th March 1867	Alexander Septimus Macrae.
Certain improvements in miners' safety lamps -	617	5th March 1867	George Rowley.
Machinery for boring and excavating coal and other materials.	733	14th March 1867	William Read.
Improved safety apparatus for mining cages, hoists and lifts.	754	15th March 1867	John Povey Harper.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
MINING, &c.—*continued.*			
Machinery for obtaining and giving off motive-power, for the purpose of working the different kinds of machines in any mines, or for hauling, driving or drawing any kind of carriages in mines or other places.	848	23rd March 1867	Loxley Horsfield.
An improved means of draining mines, coal pits and other places from whence it is desired to raise water.	860	25th March 1867	William Matthews.
Machinery for cutting channels in stone and for working in quarries. (*Communicated by George Jeffards Wardwell.*)	864	25th March 1867	William Edward Newton.
Improvements in machinery employed in getting coal and other minerals, and in tramways to be used therewith, also in engines to be worked by compressed air or other fluid.	886	26th March 1867	George Edmund Donisthorpe.
Manufacture of gunpowder - - - (*for blasting.*)	960	30th March 1867	Friedrich Hahn.
Improvements in machinery employed in getting coal and other minerals, and in rail or tramways to be used therewith.	964	30th March 1867	James Grafton Jones.
Improvements in the preparation of explosive compounds, and in making up cartridges or charges therewith. (*for blasting.*)	989	2nd April 1867	John Fry Reeves.
Certain improvements in miners' safety lamps -	992	3rd April 1867	Eric Hugo Waldenstrom.
An improved combined lift and force pump - (*for mines.*)	1026	5th April 1867	Stephen Matthews.
Machinery for actuating tools used in mining or excavating or boring, part of the improved machinery being also applicable for actuating mine or other pumps.	1123	16th April 1867	George Simpson.
A new improved apparatus applicable to the ventilation of mines, buildings and other places.	1194	25th April 1867	Theodore Lemielle.
Lubricators for the supply of mineral and other oils to bearings and journals of shafts, pit tubs, and other parts requiring lubrication.	1261	1st May 1867	Ferdinand Jossa.
Manufacture of wagons for collieries, railways and other similar purposes - - -	1273	2nd May 1867	James Lomax. John Lomax.
Apparatus used in getting coal, stone and other minerals - - - - -	1311	4th May 1867	Theophilus Wood Bunning. William Cochrane.
Coal-mining machinery - - - -	1388	10th May 1867	Charles Jones.
Gunpowder for mining purposes - -	1408	13th May 1867	Gustav Adolph Neumeyer.
Mining, tunnelling and stone-dressing machines, and valve motion therefor. (*Communicated by Richard Channing More Lovell.*)	1566	27th May 1867	William Snell.
Construction of safety lamps for miners - -	1597	29th May 1867	Edward Jones.
Improvements in engines for boring rock, cutting coal, and boring, cutting or working in other material, and in stands or frames for such engines, the improvements in engines being partly applicable to other purposes.	1704	10th June 1867	Frederick Bernard Dœring.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
MINING, &c.—*continued.*			
An improved mechanical arrangement for preventing overwinding in shafts of coal and other mines.	1777	18th June 1867	William Fairley.
Lifts or cages and tubs for raising minerals from pits or mines and for other like purposes.	1781	18th June 1867	Job Edwards.
Apparatus to be used for getting coal, stone and other minerals.	1783	18th June 1867	James Grafton Jones.
Improvements in buckets for pumps, especially suitable for pumps for mines, and in pistons for steam and other engines.	1821	21st June 1867	Francis Reddicliffe.
Machinery or apparatus for raising and forcing water and other fluids - - - - (*draining mines.*)	1828	22nd June 1867	Thomas Wilson. William Hall.
Miners' lamps - - - - -	1908	29th June 1867	Charles Cosset Dubrulle.
Improvements in boring or sinking wells and in apparatus and tools employed for that purpose.	1916	1st July 1867	Joseph Chaudron.
Improvements in machinery employed in getting coal, stone and other minerals, and in apparatus connected therewith.	1927	2nd July 1867	John Sturgeon.
Miners' safety lamps - - - -	1938	3rd July 1867	David Pemberton Morison.
An improved self-acting buckle or coupling to be employed for lifting, hoisting, or winding at coal pits or for other similar purposes - -	2025	10th July 1867	William Heyes. William Bevan.
Improved apparatus for boring or perforating rocks, metals or other substances. (*Communicated by Horric de la Roche Tolay.*)	2027	10th July 1867	William Edward Newton.
Improvements in safety apparatus for raising and lowering persons and weights in mines, applicable to other purposes.	2044	12th July 1867	Eugéne Henri Bernier.
Improvements in fire-escapes, the same being suitable for ascending and descending mines or other deep places, and at other times convertible into a piece of furniture, such as a couch, ottoman, chair, table or other similar article.	2069	13th July 1867	John Scott.
Certain improvements in pulley and chain gearing to be employed for lifting or traction purposes, for moving fire bars in furnaces, or for driving mechanism. (*for mining.*)	2073	15th July 1867	Thomas Wrigley.
Improved apparatus for the prevention of overwinding and falling of the cages used in mine shafts, lifts and hoists.	2144	23rd July 1867	John Marley.
An improved machine for cutting slate in quarries previous to laying them open, and for cutting in coal pits, mines and stone quarries. (*Communicated by Joseph Debry.*)	2177	27th July 1867	William Edward Gedge.
An improved chemical mixture or compound for extinguishing fires and destroying explosive fire-damp in coal mines.	2200	30th July 1867	Joseph Jones.
Miners' safety lamps - - - -	2230	1st Aug. 1867	Samuel Higgs.
Certain improvements in safety apparatus to be employed for preventing accidents in winding coals and other minerals from mines.	2350	15th Aug. 1867	Edward Ormerod.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
MINING, &c.—*continued.*			
Improvements in machinery used in cutting coal, stone, slate and other minerals, and in forming tunnels and galleries, and for other quarrying purposes.	2451	28th Aug. 1867	John Elliott.
Signalling and indicating apparatus - - (*applicable to mining engines.*)	2468	29th Aug. 1867	Arthur McNutt Wier. Marshall Arthur Wier.
Machinery for boring, cutting or working in rock, coal and other mineral.	2503	4th Sept. 1867	Frederick Bernard Dœring.
Improvements in connection with miners' safety lamps.	2521	5th Sept. 1867	Henry Gardner.
Improvements in tunnelling and quarrying slate and other minerals, and in machinery used for these purposes.	2580	11th Sept. 1867	William Fothergill Cooke.
Improvements in machinery or apparatus for cutting or working rocks and other hard substances, chiefly designed for mining, tunnelling and other like operations. (*Communicated by Herman Haupt.*)	2607	16th Sept. 1867	James Asbury McKean.
Improvements in mining and other lamps, and in lamp and candle cases and holders.	2818	7th Oct. 1867	Jonathan Aldous Mays.
Apparatus for boring holes in stone, shale and minerals - - - -	2830	8th Oct. 1867	Francis Love. William Armstrong. Levi Widdowson.
Machinery or apparatus applicable to cages or hoists used in mining or lifting machines.	2934	18th Oct. 1867	John King.
Fans for the ventilation of mines, or for propelling air into furnaces, or for other purposes.	2964	22nd Oct. 1867	Theodore Lemielle.
Improvements in machinery employed in getting coal, stone and other minerals, and in apparatus connected therewith.	3076	1st Nov. 1867	John Sturgeon.
Construction of safety lamps for mines - -	3181	11th Nov. 1867	Samuel Buxton. William Gardam.
Safety lamps - - - - -	3209	13th Nov. 1867	Joseph Wilson Lowther. Thomas Bennett.
Improvements in means of communication applied to railway carriages, and in apparatus for making signals, which improvements are in part applicable to other purposes. (*fastening cords used in mining.*)	3284	20th Nov. 1867	Hugh Hughes Lloyd.
An improved tool to be used for cutting rocks or stone and other similar substances.	3311	22nd Nov. 1867	Archibald Munro.
Miners' safety lamps - - - -	3376	28th Nov. 1867	Thomas Story Horn.
Improvements in machinery for boring rocks, and in apparatus for driving rock-boring, tunnelling, coal-cutting and other machinery employed in mines, collieries and quarries - - -	3386	29th Nov. 1867	Thomas Brown Jordan. John Darlington.
Improvements in miners' safety lamps and in the mode of manufacturing the same.	3427	2nd Dec. 1867	Frederick Foster.
Production of materials suitable for blasting and other similar purposes. (*Communicated by Carl Dittmar.*)	3458	5th Dec. 1867	John Henry Johnson.
Manufacture of explosive and fulminating powders - - - - - (*for blasting.*)	3469	5th Dec. 1867	Paul Gustave Louis Gabriel Designolle. John Casthelaz.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
MINING, &c.—*continued.*			
Improvements in brattice cloth and in its manufacture. (*for collieries.*)	3561	14th Dec. 1867	John Howard Kidd.
Improvements in sinking tubes or cylinders for obtaining and raising water, and in the apparatus for effecting the same.	3572	16th Dec. 1867	James Eglinton Anderson Gwynne.
Improvements applicable to the rigging, chains, windlasses, anchors and other parts of ships or vessels, or to collieries, railways, rolling stock or other purposes, to prevent sudden blows, jerks or strains.	3637	21st Dec. 1867	James Davison.
Construction of miners' safety lamps - -	3640	23rd Dec. 1867	John Rowe.
An elastic coupling for the prevention of sudden or undue strains upon ropes or chains when used in towing, hauling or lifting - - (*used in mining.*)	3641	23rd Dec. 1867	William Dixon. William Brown.
Production of explosive compounds - - (*for blasting.*)	3652	24th Dec. 1867	Frederick Augustus Abel.
For Colliery Signals, *see* "SIGNALS."			
MIXING, MASHING, STIRRING, AGITATING.			
Improvements in the mode of and apparatus for manufacturing beton, and in the method of applying beton for certain constructive or structural purposes. (*Communicated by François Coignet.*)	77	11th Jan. 1867	Michael Henry.
Improvements in the construction of apparatus for mixing, pressing and moulding coal and other substances for the formation of artificial fuel, and dividing the same into blocks, such apparatus being also applicable to other analogous operations.	123	17th Jan. 1867	David Barker.
An improved mixing apparatus, also applicable to beating eggs and to other similar purposes.	637	7th March 1867	Alfred Giles.
Improvements in the manufacture of manure and in apparatus for the same. (*Communicated by Jean Georges Lucien Renard.*)	933	29th March 1867	William Clark.
Apparatus for mixing paint, putty and other like substances - - - - -	1185	24th April 1867	James Smalley. Samuel Bridge.
Disinfection and treatment of fecal and other matters for the manufacture of manure. (*mixing the disinfectant.*) (*Communicated by Louis Verstraet.*)	1229	27th April 1867	Emile Guenin.
Improvements in the manufacture of gas and in the apparatus for holding the same. (*mixing with superheated steam.*)	1272	2nd May 1867	Peter Salmon.
An improved egg beater, the same being applicable for mixing liquors and for other like purposes. (*Communicated by Howard Tilden.*)	1374	9th May 1867	Thomas Brown.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
MIXING, &c.—*continued.*			
Construction of machinery for preparing and mixing food for pigs and other animals.	1385	10th May 1867	Ralph Mellard.
Machinery for washing and drying wool and other materials. (*agitating.*)	1486	18th May 1867	James Lee Norton.
A new metallic zinc paint - - -	1845	25th June 1867	James Webster.
Apparatus for the manufacture of artificial fuel, which apparatus may also be employed for other purposes.	2065	13th July 1867	Henry Fletcher.
Machinery or apparatus for washing coprolites - (*agitator.*)	2316	12th Aug. 1867	Joseph James Rawlings. Henry Wilkerson.
An apparatus for heating, boiling, agitating and raising size and other liquids.	2500	4th Sept. 1867	Hugh Gardiner Graham.
Improvements in smoke-consuming apparatus for steam-boiler and other furnaces, and in machinery for manufacturing parts of the same.	2871	12th Oct. 1867	Jean Baptiste Pierre Alfred Thierry.
Improvements in apparatus for stirring or agitating solid substances and for exposing them to the action of the air, gases and vapours.	3124	5th Nov. 1867	Arthur McDougall.
Manufacture of artificial fuel - - -	3198	12th Nov. 1867	William Henry Crispin.
Merchants' ships and other vessels and appliances connected therewith. (*mixing fuel.*)	3331	25th Nov. 1867	George Bell Galloway.
Manufacture of malleable metal of a steely quality, partly from Bessemer "scrap" or other Bessemer metal - - - - - -	3463	5th Dec. 1867	Stanhope Perkins. William Smellie.
Improvements in tanning and in the apparatus to be employed therein. (*plunger for agitating.*)	3649	23rd Dec. 1867	Jonas Dawkins.
Apparatus for heating and agitating liquid or fluid substances.	3678	27th Dec. 1867	David Steele.
Mode of and apparatus for combining the vapours of liquid hydrocarbons with oxygen and hydrogen, and burning the mixture as fuel. (*Communicated by David Oliver Macomber.*)	3706	31st Dec. 1867	Marc Antoine François Mennons.

MOTIVE-POWER MACHINES; OBTAINING MOTIVE-POWER.

I.—Air, Gas and Wind Engines and Mills; Pneumatic Motive-power.

Obtaining and applying motive-power - -	278	1st Feb. 1867	Isham Baggs.
Machinery for obtaining and applying motive-power. (*Communicated by Gustav Odemar.*)	472	21st Feb. 1867	Edward Griffith Brewer.
Gas engines - - - - -	499	23rd Feb. 1867	Arthur Kinder. William Barns Kinsey.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
MOTIVE-POWER, &C.—*continued.*			
An improved mode or means for actuating motive-power engines, and improvements in the apparatus employed therefor.	558	28th Feb. 1867	Andrew M^{c}Callum.
Steam and gas engines - - - - (*Communicated by Charles E. Emery.*)	571	28th Feb. 1867	Alfred Vincent Newton.
Engines worked by heated air and by other suitable heated gas or gases.	633	7th March 1867	Alphonse Louis Normandy.
Applying wind-power for working ships' pumps -	727	13th March 1867	John Griffith.
Heated air engines - - - -	776	18th March 1867	Francis Herbert Wenham.
Machinery for obtaining and giving off motive-power, for the purpose of working the different kinds of machines in any mines, or for hauling, driving or drawing any kind of carriages in mines or other places.	848	23rd March 1867	Loxley Horsfield.
Improvements in machinery employed in getting coal and other minerals, and in tramways to be used therewith, also in engines to be worked by compressed air or other fluid.	886	26th March 1867	George Edmund Donisthorpe.
Engines worked by steam, water and other fluids and gases under pressure.	904	28th March 1867	William Bryer Nation.
An improved air engine so arranged that it may be driven exclusively by the expansion of air, or the heated air may pass through a steam generator and the steam so generated be used in addition to the expanded air, to enhance the pressure upon the piston and thus add to the power of the engine.	924	29th March 1867	Philander Shaw.
Motive-power engines - - - -	1164	22nd April 1867	John Peebles.
Machinery or apparatus for navigating the air -	1392	10th May 1867	William Smyth.
Rotatory engines and pumps - - -	1529	22nd May 1867	Ebenezer William Hughes. Thomas Howard Head.
Improvements in the production of motive-power and in the apparatus connected therewith. (*air and steam.*) (*Communicated by Jacques Belou.*)	1575	28th May 1867	Henri Adrien Bonneville.
An improved mode of obtaining motive-power and the apparatus employed therein.	1594	29th May 1867	Thomas Edmund Passee.
A new or improved engine or machine for obtaining and applying motive-power.	1604	30th May 1867	James Francombe.
Obtaining motive-power - - - -	1691	8th June 1867	James Hargreaves.
Improvements in engines for boring rock, cutting coal, and boring, cutting or working in other material, and in stands or frames for such engines, the improvements in engines being partly applicable to other purposes.	1704	10th June 1867	Frederick Bernard Dœring.
An improved apparatus for utilizing the power spent in stopping or retarding the motion of carriages and other vehicles and machinery, as also the power produced by carriages and other vehicles when moving down inclines. (*compressing air for accelerating motion.*) (*Communicated by Jules Péan.*)	1762	17th June 1867	Charles Denton Abel.
An improved mode of obtaining motive-power -	1787	19th June 1867	Francis William Waide.
Rotary engines and pumps - - -	1791	19th June 1867	Ebenezer William Hughes. Thomas Howard Head.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
MOTIVE-POWER, &c.—*continued.*			
Improvements in actuating motive-power engines and in the apparatus or means employed therefor.	1892	28th June 1867	Colin Brown.
Improvements in engines worked by the combustion of inflammable aëriform fluids, and in apparatus for producing such fluids.	2000	8th July 1867	Matthew Piers Watt Boulton.
Safety or relief valves - - - -	2053	12th July 1867	John Pasfield.
Improvements in the manufacture of gases for the production of light, heat and motive-power, and in apparatus for that purpose.	2180	27th July 1867	Paul Alexander Rohart.
Combined gas and air engines - - - (*Communicated by Eugen Langen and Auguste Nicol Otto.*)	2245	3rd Aug. 1867	Charles Denton Abel.
Improvements in machinery or apparatus for raising or forcing water or other fluids, and for the transmission of the motive-power of water, steam or other fluid or gases - -	2278	7th Aug. 1867	Francis Carr Marshall. Hugh Stewart.
Heated air engines - - - -	2346	15th Aug. 1867	Francis Herbert Wenham.
Improved means and apparatus for producing motive-power.	2523	6th Sept. 1867	Noble Seward, M.D.
An improved rotary steam or gas engine, also applicable for pumping and measuring liquids.	2536	7th Sept. 1867	Emile Hubner.
Method of and apparatus for obtaining and applying motive-power.	2633	19th Sept. 1867	William Jeremiah Murphy.
Apparatus for producing motive-power by means of compressed air, water or other liquid. (*Communicated by Jean Ventouillac, Louis Ventouillac and Edouard Jau.*)	2899	16th Oct. 1867	Alexander Melville Clark.
Apparatus for compressing air and for working pneumatic railways.	2978	23rd Oct. 1867	Frederic Seiler.
An improved gas engine - - - - (*Communicated by Jean Mazieres and Jules Trottier.*)	3237	15th Nov. 1867	William Edward Gedge.
Improvements in obtaining motive-power and in apparatus employed therein - - -	3316	23rd Nov. 1867	George Harrison Bolton. William Whitthread. Edward Bolton. Thomas Robinson.
Improvements in the manufacture of gas, and in the treatment and application of such and other gases for cooking, warming, lighting, generating of steam and other purposes, combined with their nse as a motive-power previous to being burned or consumed, and improvements in the apparatus for these purposes.	3318	23rd Nov. 1867	Peter Salmon.
Engines worked by heated air or gas - -	3466	5th Dec. 1867	Arthur Charles Sterry.
Engines actuated by air, steam or other fluids -	3576	16th Dec. 1867	George Dominicus Kittoe.
Method of and apparatus for raising water - - (*windmill.*) (*Communicated by Jan Barend Hendrik Van Royen.*)	3590	17th Dec. 1867	William Armand Gilbee.
Metallic pistons for steam cylinders, air cylinders or pumps.	3685	28th Dec. 1867	Jacob Goodfellow.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
MOTIVE-POWER, &c.—*continued.*			
Improvements in motors or apparatus for generating motive-power, and in the method of applying the same to produce useful effect. (*Communicated by Benjamin Talbot Babbitt.*)	3690	28th Dec. 1867	William Edward Newton.
See also "GOVERNORS."			
II.—Steam-Engines. (*Stationary, Locomotive and Marine.*)			
Improvements in planing machines, which improvements are also applicable to other machines and engines in which sliding surfaces are employed. (*slides of steam-engines.*)	2	1st Jan. 1867	William Muir.
Steam jackets for steam-engines - - -	35	5th Jan. 1867	Edward Alfred Cowper.
Improvements in engines for boring and working rock and other material, and in stands for such engines, the improvements in engines being partly applicable to other purposes.	43	7th Jan. 1867	Frederick Bernard Dœring.
Improved apparatus for regulating, controlling and for varying the speed of shafts and machinery. (*engines for common roads.*)	51	8th Jan. 1867	Robert Robinson.
Steam-engines - - - - -	61	9th Jan. 1867	James Petrie.
Rotary engines - - - - (*Communicated by Truman Merriam and James Cushing.*)	100	14th Jan. 1867	William Clark.
Certain novel and improved combinations and arrangements of differential wheel gearing, and its application to various purposes - - (*for traction engines.*)	125	18th Jan. 1867	Charles Frederick Cooke. John Standfield.
Locomotive engines - - - -	146	19th Jan. 1867	Edward Slaughter.
Common road traction engines - - - (*Communicated by Albert Schmid.*)	267	31st Jan. 1867	John Henry Johnson.
Improvements in machine tools for manufacturing parts of locomotive engines, parts of which improvements are also applicable to other similar or analogous purposes.	334	6th Feb. 1867	Stephen Alley.
Slide valves - - - -	343	7th Feb. 1867	William George Beattie.
An improved steam roller, also applicable as a traction engine and portable engine.	347	7th Feb. 1867	William Thomas Carrington.
Machinery or apparatus for boring and planing metals. (*steam-engine cylinders.*)	361	8th Feb. 1867	Henry Allason Fletcher.
Construction of motive-power engines - -	422	15th Feb. 1867	Robert Shaw.
Lubricating apparatus - - - - (*for steam-engines.*)	467	21st Feb. 1867	William Sutton Gamble.
Machinery for obtaining and applying motive-power. (*Communicated by Gustav Odemar.*)	472	21st Feb. 1867	Edward Griffith Brewer.
Motive-power engines - - -	474	21st Feb. 1867	John Weems. Thomas Robertson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
MOTIVE-POWER, &c.—*continued.*			
Improvements in railway engines and carriages, and in railways applicable for the purpose of locomotion on inclines, and also for retarding and stopping such engines and carriages. (*Communicated by Pierre Ambjorn, Comte de Sparre.*)	493	22nd Feb. 1867	Michael Henry.
Improvements in tilling and cultivating land by steam power, and in machinery or apparatus for such purposes. (*traction engines.*)	497	23rd Feb. 1867	John Phillips Smith.
Motive-power engines to be worked by water, steam or other fluid, and applicable to pumps.	498	23rd Feb. 1867	Henry Purnell.
An improved lubricator or tallow cup - - (*for steam-engines.*)	507	23rd Feb. 1867	John Bates.
Steam-engines - - - - -	527	27th Feb. 1867	Clement Martin.
An improved steam driving wheel for imparting rotary motion to shafts.	536	27th Feb. 1867	William Stobbs.
Steam and gas-engines - - - (*Communicated by Charles E. Emery.*)	571	28th Feb. 1867	Alfred Vincent Newton.
Condensing steam-engines - - -	586	2nd March 1867	John Wild the younger.
Manufacture of packing for the joints of steam-engines, pumps and for other purposes. (*Communicated by Morris Botticher.*)	613	5th March 1867	George Haseltine.
Steam-engines and pumps - - - (*Communicated by Hart Foster Pease.*)	621	6th March 1867	John Garrett Tongue.
Bearings for railway axles - - - (*for locomotive engines.*) (*Communicated by Claes Adelskold.*)	672	9th March 1867	Lorentz Tidén.
Valves for steam-engines and other purposes -	703	12th March 1867	Bernard Peard Walker.
Slide valves of steam-engines - - -	718	13th March 1867	Justin Thèvenet.
Construction and arrangement of steam-engines for the propulsion of boats and other vessels.	747	15th March 1867	Edward Pelleu Plenty.
Rotary engines and pumps - - - (*Communicated by Dexter Davis Hardy.*)	755	15th March 1867	William Robert Lake.
Slide valve gear for steam-engines - -	759	16th March 1867	John Milner.
Steam-engines and boilers - - -	771	16th March 1867	Edward Ellis Allen.
Process of and apparatus for cleaning waste and other substances, and preventing the adhesion of sediment in steam-boilers and pipes. (*lubricating pistons and cylinders.*)	774	18th March 1867	John Smith.
Improvements applicable to steam-boilers and engines, for economizing fuel in the generation of steam, and in the apparatus connected therewith.	783	19th March 1867	John Robinson.
Valve gear of steam-engines - - - (*Communicated by William Wright.*)	882	26th March 1867	William Edward Newton.
Engines worked by steam, water and other fluids and gases under pressure.	904	28th March 1867	William Bryer Nation.
An improved system of tank locomotive engine -	977	2nd April 1867	Jean Jacques Meyer. Adolphe Meyer, junr.
Railways and railway engines - - -	1016	4th April 1867	Barnard Fowler David Greig.
Valve seats - - - - -	1066	10th April 1867	James Robert Napier. William John Macquorn Rankine.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
MOTIVE-POWER, &c.—*continued.*			
Oscillating steam-engines - - -	1124	16th April 1867	Daniel Rankin.
Motive-power engines - - -	1164	22nd April 1867	John Peebles.
Steam-engines - - - - - (*Communicated by Frederick W. Gordon.*)	1203	25th April 1867	John Millward.
Construction of motive-power engines - -	1225	27th April 1867	Thomas Paton.
Improvements in locomotive and traction engines, applicable also to the raising of heavy bodies. (*Communicated by Theodore Krausch.*)	1285	2nd May 1867	John Henry Johnson.
Slide valves of steam-engines - - -	1306	4th May 1867	Justin Thèvenet.
Valves for regulating the flow of liquids, gases and other elastic fluids. (*to replace slide valves.*)	1335	7th March 1867	Eugène Bourdon.
Hydraulic valve gear for steam and analogous engines.	1348	7th May 1867	Norman Willis Wheeler.
Construction and packing of slide valves and adjacent parts for steam and other engines.	1350	7th May 1867	Norman Willis Wheeler.
Apparatus for introducing and controlling the introduction of fluids to surface condensers of steam-engines.	1351	7th May 1867	Norman Willis Wheeler.
An improved mode of lubricating the stuffing boxes of steam-engines and pumps, and of rendering the packing for such or other machines or apparatus waterproof and more durable than heretofore. (*Communicated by Abraham Littlewood, Francis W. Bloodgood and Henry Dirks Ostermoor.*)	1378	9th May 1867	William Edward Newton.
Rotary engines - - - - (*Communicated by Freidrich August Vogelsang.*)	1383	10th May 1867	Frederick Bernard Dœring.
Valves for steam and other fluids - - (*for steam-engines.*)	1384	10th May 1867	William Bracewell. William Pickup. Benjamin Lund.
Rotary engines - - - -	1398	11th May 1867	George Fitzjames Russell.
Slide valves - - - - -	1479	18th May 1867	Charles William Dixon.
Rotatory engines and pumps - -	1529	22nd May 1867	Ebenezer William Hughes. Thomas Howard Head.
Improvements in the production of motive-power and in the apparatus connected therewith. (*air and steam.*) (*Communicated by Jacques Belou.*)	1575	28th May 1867	Henri Adrien Bonneville.
Marine and other steam-engines on the high and low pressure compound principle.	1596	29th May 1867	Henry Turner.
A new or improved engine or machine for obtaining and applying motive-power.	1604	30th May 1867	James Francombe.
Steam-engines - - - -	1661	6th June 1867	Edward Bland.
An improved mode of obtaining motive-power -	1787	19th June 1867	Francis William Waide.
Rotary engines and pumps - - -	1791	19th June 1867	Ebenezer William Hughes. Thomas Howard Head.
Improvements in buckets for pumps, especially suitable for pumps for mines, and in pistons for steam and other engines.	1821	21st June 1867	Francis Reddicliffe.
Construction of motive-power engines and pumps -	1822	21st June 1867	Emory McClintock.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
MOTIVE-POWER, &c.—*continued.*			
Steam-engines	1865	26th June 1867	Alexander Caesar Frederick Franklin.
Self-acting escape or relief valves applied to the cylinders of steam-engines	1940	3rd July 1867	Walter Samuel Scott. William Henry Steel.
Motive-power engines	1941	3rd July 1867	Robert Shaw.
Steam-engines	1966	4th July 1867	Hamilton Ruddick.
Improvements in or applicable to steam and other motive engines.	1974	6th July 1867	Walter Charles Church.
Rotary engines and rotary pumps	1984	6th July 1867	William Archer.
Traction engines or road locomotives	1999	8th July 1867	Nathaniel Clayton. Joseph Shuttleworth.
Side valves suitable for steam-engines	2001	8th July 1867	Nathaniel Clayton. Joseph Shuttleworth.
Marine steam-engines	2003	9th July 1867	John McFarlane Gray.
An improved method of conveying the rotary motions to axles of steam-engines and all machines and carriages where cranks are used.	2036	11th July 1867	Kenelm John Winslow.
Steam-engines	2101	17th July 1867	John Russell Swann.
Improvements in the lateral action or induction of fluids and in the apparatus or mechanism employed therefor.	2106	18th July 1867	Alexander Morton.
Steam-engines	2169	26th July 1867	Jonathan Edge.
Improvements in machinery or apparatus for raising or forcing water or other fluids, and for the transmission of the motive-power of water, steam or other fluid or gases	2278	7th Aug. 1867	Francis Carr Marshall. Hugh Stewart.
Certain improvements in steam-engines	2284	8th Aug. 1867	George Holcroft. William Nathan Dack.
Improvements in or applicable to slide valves for admitting the flow or passage of steam, water or other fluids and gases when pressed	2300	10th Aug. 1867	John Davenport. John Kitson.
Slide valves	2402	22nd Aug. 1867	Thomas Sault.
Apparatus for raising water or other liquids by steam power. (*Communicated by William Lewis Horne.*)	2408	22nd Aug. 1867	Alexander Melville Clark.
Construction of locomotive traction engines	2456	28th Aug. 1867	Robert Edwards.
Machinery for boring, cutting or working in rock, coal and other mineral.	2503	4th Sept. 1867	Frederick Bernard Dœring.
Carrying passengers through the air by a steam bird or flying steam-engine fitted with wings flapped by the action of steam.	2504	4th Sept. 1867	John Kinnersley Smythies.
Steam-engines	2535	7th Sept. 1867	James Armstrong. Edwin Eccleston.
An improved rotary steam or gas engine, also applicable for pumping and measuring liquids.	2536	7th Sept. 1867	Emile Hubner.
Construction of stuffing-boxes, slide valves and steam jacketings.	2556	10th Sept. 1867	John Jordan.
A mode of increasing the efficiency of steam for motive-power purposes. (*Communicated by John Blake Tarr.*)	2600	14th Sept. 1867	William Edward Newton.
Improvements in and applicable to slide valves	2625	18th Sept. 1867	Thomas Adams. George John Parson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
MOTIVE-POWER, &C.—*continued.*			
Steam-engines	2713	26th Sept. 1867	John Wood. Benjamin Wood. Richard Wood.
Locomotive engines and their permanent ways	2755	30th Sept. 1867	John Clark.
An improved steam-engine	2806	5th Oct. 1867	Alfred Morgan Gillham.
Slide valves of steam-engines	2812	7th Oct. 1867	Jacob Goodfellow.
Improvements in locomotive engines, vehicles and appendages thereto, for better and safer working on railways, tramways and common roads.	2907	17th Oct. 1867	William Bridges Adams.
An improved mode of and means for preventing the bursting of the tubes in steam and water pressure gauges, and other tubes or pipes, from the effects of cold. (*Communicated by Ernest Dubois.*)	2925	18th Oct. 1867	Edward Caspar.
Locomotive engines	3023	26th Oct. 1867	William Kendall.
Improvements in the manufacture of circular webbing or gasket, applicable as packing for steam-engines, as covering for telegraph cables and other useful purposes, and in the machinery employed therein.	3046	29th Oct. 1867	Joseph Threlfall Carter.
Improvements in actuating the valves of water and other meters, and of engines for obtaining motive-power.	3050	29th Oct. 1867	Loftus Perkins.
Improvements in rotary engines applicable as motors, pumps, meters and for other purposes, also in indicators applicable to such and other engines or meters and other purposes. (*Communicated by Arthur Perry Emery.*)	3219	13th Nov. 1867	Alfred Vincent Newton.
Construction of locomotive engines for mountain rail or tramways.	3221	14th Nov. 1867	Robert Francis Fairlie.
Motive-power engines	3279	19th Nov. 1867	Andrew Barclay.
Traction engines	3280	19th Nov. 1867	Edward Trevythan Trenery.
Packing for the piston heads of steam cylinders (*Communicated by Horace M^cMurtrie.*)	3293	21st Nov. 1867	William Robert Lake.
Improvements in steam and other motive-power engines and in valves for engines	3299	21st Nov. 1867	William Robert Green. John George Freeman.
Rotary engines and pumps	3304	21st Nov. 1867	Ebenezer William Hughes.
Improvements in gibs applicable to the cross heads and other parts of engines and other machinery, also in the means employed for lubricating the same and other sliding or frictional surfaces. (*Communicated by William Armstrong Devon.*)	3309	22nd Nov. 1867	John Garrett Tongue.
Marine steam-engines	3320	23rd Nov. 1867	William Macnab.
An improved construction of rotary steam-engine (*Communicated by William Owen.*)	3334	25th Nov. 1867	Alfred Vincent Newton.
Certain improvements in steam-engines	3379	28th Nov. 1867	Edward Wood.
An improved brake-washer (*for steam-engines.*) (*Communicated by Arthur Dillon-Corneck.*)	3399	30th Nov. 1867	William Edward Gedge.
Valves for steam-engines	3421	2nd Dec. 1867	William Black. Thomas Hawthorn.
Improvements in steam winches, which are also applicable to other similar purposes. (*applicable to steam-engines.*) (*Communicated by Joseph Corradi.*)	3425	2nd Dec. 1867	George Breen.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
MOTIVE-POWER, &c.—*continued.*			
Portable and other steam-engines and boilers -	3439	3rd Dec. 1867	William Brown. Charles Neale May.
Condensers - - - - -	3470	5th Dec. 1867	Edmund Alfred Pontifex.
Improvements in elastic packings for the pistons of steam-engines and for other purposes, and in the machinery employed in the manufacture of such packings.	3495	9th Dec. 1867	Edward Keirby.
An improved rotary water or steam motive-power engine - - - - - -	3508	10th Dec. 1867	William Bradshaw Leachman.
Certain improvements in steam-engines - -	3512	11th Dec. 1867	George Holcroft. William Nathan Dack.
An improved equilibrium slide valve for steam-engines - - - - - -	3528	12th Dec. 1867	Richard Roberts. Philip Williams.
Steam cylinders and the peculiar arrangement of the mechanism connected therewith - -	3530	12th Dec. 1867	Noah Paxman, jun^{r}.
Engines actuated by air, steam or other fluids -	3576	16th Dec. 1867	George Dominicus Kittoe.
Means of and apparatus for obtaining and applying hydrogen gas to the furnaces of steam-engines, boilers and kilns for the manufacture of bricks and lime.	3580	16th Dec. 1867	James Standfield.
Construction of rotary engines - - -	3648	23rd Dec. 1867	Simon Salter.
Improvements in motive-power engines, part of which improvements are applicable to the arrangement and construction of pumps for raising and forcing liquids, fluids and other substances generally.	3656	24th Dec. 1867	Christopher Pottinger.
Metallic pistons for steam cylinders, air cylinders or pumps.	3685	28th Dec. 1867	Jacob Goodfellow.
Construction of steam-engines and boilers -	3709	31st Dec. 1867	Thomas Messenger.
See also "GAUGES." „ „ "GOVERNORS."			
III.—Water-wheels and Engines; Hydraulic Motive-power.			
An improved method of and apparatus for obtaining motive-power.	42	7th Jan. 1867	Juan Vila y Jové.
Certain improvements in meters for gas and liquids, such improved meters being also applicable as a motive-power. (*Communicated by Homer H. Stuart.*)	109	16th Jan. 1867	John Colvill.
An improved hydrostatic engine - - -	120	17th Jan. 1867	Charles George Braxton.
The use or adaptation of water pipes or syphons in combination with turbine wheels or other hydraulic engines, for the production of motive-power for propelling ships.	135	18th Jan. 1867	Richard Robert Loane Rosoman.
Apparatus for obtaining and applying motive-power. (*Communicated by Gerolamo Cavanna.*)	393	12th Feb. 1867	William Clark.
Construction of motive-power engines - -	422	15th Feb. 1867	Robert Shaw.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
MOTIVE-POWER, &c.—*continued.*			
Machinery for obtaining and applying motive-power. (*Communicated by Gustav Odemar.*)	472	21st Feb. 1867	Edward Griffith Brewer.
Motive-power engines to be worked by water, steam or other fluid, and applicable to pumps.	498	23rd Feb. 1867	Henry Purnell.
Hydraulic motors - - - - - -	641	7th March 1867	Paul Rapsey Hodge.
Rotary engines and pumps - - - (*or water engines.*) (*Communicated by Dexter Davis Hardy.*)	755	15th March 1867	William Robert Lake.
Engines worked by steam, water and other fluids and gases under pressure.	904	28th March 1867	William Bryer Nation.
Improvements in apparatus for receiving motion or energy from fluids and for imparting it to them, and in the propulsion of vessels, and apparatus to be used for that purpose.	915	28th March 1867	Matthew Piers Watt Boulton.
An improved hydraulic engine for obtaining motive-power. (*Communicated by Charles Faivre, sen^{r}.*)	953	30th March 1867	William Edward Newton.
Machinery or apparatus for obtaining and applying motive-power.	984	2nd April 1867	Jean Albert Moll.
Apparatus for propelling vessels - - - (*hydraulic wheel.*)	1039	6th April 1867	Walter Watson Hughes.
Machinery or apparatus for maintaining and augmenting motive-power.	1059	9th April 1867	Hugh Forbes.
Motive-power engines - - - - -	1164	22nd April 1867	John Peebles.
Construction of turbines and other hydraulic engines or apparatus for obtaining motive-power, and for measuring the flow of fluids -	1300	3rd May 1867	John Ramsbottom. Thomas Massey Pearce.
Rotatory engines and pumps - - -	1529	22nd May 1867	Ebenezer William Hughes. Thomas Howard Head.
Improvements in apparatus for measuring fluids, which improvements are also applicable for obtaining motive-power and for pumping -	1561	27th May 1867	Herbert Frost, senior. Herbert Frost, junior.
A new or improved engine or machine for obtaining and applying motive-power.	1604	30th May 1867	James Francombe.
Rotary engines and pumps - - -	1791	19th June 1867	Ebenezer William Hughes. Thomas Howard Head.
Apparatus for obtaining motive-power from rivers or streams of water, and for facilitating boats ascending and descending rivers or streams. (*Communicated by Louis Roman.*)	1831	22nd June 1867	Joseph Longo Vinchiaturo, Le Marquis de Cosentino.
An economical system of raising running waters with apparatuses fixed or carried on boats, and without dams or steam-engines, but by the simple use of the force produced by the current of a river or watercourse. (*Communicated by Alphonse Lalauze.*)	1868	27th June 1867	William Edward Gedge.
Motive-power engines - - - -	1941	3rd July 1867	Robert Shaw.
Improvements in machinery or apparatus for raising or forcing water or other fluids, and for the transmission of the motive-power of water, steam or other fluid or gases - - -	2278	7th Aug. 1867	Francis Carr Marshall. Hugh Stewart.
Apparatus for obtaining motive-power and for raising and forcing water and fluids.	2289	8th Aug. 1867	Johann Ernst Friedrich Lüdeke.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
MOTIVE-POWER, &c.—*continued.*			
Improvements in or applicable to slide valves for admitting the flow or passage of steam, water or other fluids and gases when pressed - -	2300	10th Aug. 1867	John Davenport. John Kitson.
Construction of water-wheels - - -	2566	10th Sept. 1867	Aaron Kinton.
Method of and apparatus for obtaining and applying motive-power.	2633	19th Sept. 1867	William Jeremiah Murphy.
Apparatus for producing motive-power by means of compressed air, water or other liquid. (*Communicated by Jean Ventouillac, Louis Ventouillac and Edouard Jau.*)	2899	16th Oct. 1867	Alexander Melville Clark.
Apparatus for obtaining power from rivers or streams of water, and for facilitating boats ascending and descending rivers or streams. (*Communicated by Louis Roman.*)	3040	28th Oct. 1867	Victor Vicomte de Cresalles.
Apparatus for producing motive-power - - (*Communicated by William C. Stiles.*)	3090	2nd Nov. 1867	Alexander Melville Clark.
Water-meters and water-power engines - -	3369	28th Nov. 1867	Matthew Henry Larmuth. Luke Hamilton Larmuth.
Improvements in steam winches, which are also applicable to other similar purposes. (*applicable to water engines.*) (*Communicated by Joseph Corradi.*)	3425	2nd Dec. 1867	George Breen.
An improved rotary water or steam motive-power engine.	3508	10th Dec. 1867	William Bradshaw Leachman.
IV.—Electro-Magnetic Engines; Electro Motive-power.			
Apparatus for generating electricity and applying it to produce motive-power.	1314	4th May 1867	Lieut$^{t.}$ Colonel James Baker.
V.—Mechanical Motive-power, Horse-power.			
An improved mode of and machinery or apparatus for obtaining power from the motion of a ship or vessel at sea, for pumping, ventilating and other purposes. (*Communicated by Wilhelmus Johannes Van de Ven.*)	11	2nd Jan. 1867	Charles Denton Abel.
Apparatus for obtaining motive-power - -	486	22nd Feb. 1867	Charles Colwell.
Producing and applying a self-acting mechanical power for working machinery.	770	16th March 1867	Alexander James Hardy Elliot.
Obtaining motive-power and utilizing the products of combustion of liquid and other fuels. (*see* "STEAM-BOILERS.")	1008	4th April 1867	Henry Davey.
Improved apparatus for obtaining motive-power -	1291	3rd May 1867	Henry William Grylls. Henry Neville. Joseph William Brooks. James Holt.
An improved combination of mechanism for communicating motion for any purpose, whereby human power can be exercised to great advantage.	1336	7th May 1867	George Hartham.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
MOTIVE-POWER, &c.—*continued.*			
An invention for the use of all kind of industry, and called the "Perpetual movement" - -	1425	14th May 1867	Jacques Joseph Bastin. Louis Anatole Baum.
Machinery or apparatus for obtaining motive-power and applying the same to vehicles on common roads and to other useful purposes.	1705	10th June 1867	James Conolly.
Apparatus for transmitting and multiplying motive-power. (*Communicated by François Jobard.*)	2995	24th Oct. 1867	Alexander Melville Clark.
Improvements in motive-power and in apparatus employed therein.	3021	26th Oct. 1867	John Brooks.
Improved apparatus for obtaining and applying motive-power - - - - - (*from springs.*)	3087	2nd Nov. 1867	Henry William Grylls. Henry Neville. James Holt.
Improvements in apparatus for rendering innocuous the momentum of heavy bodies so as to prevent injury and damage from concussion, applicable to ships' cables, cranes, windlasses, capstans, hoists, lifts, weighing machines, ship and fort armour, to training guns, to railway trains, station buffers, fenders to pier-heads, gangways, breakwaters and other similar structures, which apparatus is also applicable for storing and accumulating power, which may be used for throwing projectiles, raising or moving heavy weights, such as ships, stranded or sunken vessels, propelling carriages and other purposes.	3302	21st Nov. 1867	William Graham McIvor.
An improved apparatus for obtaining motive-power.	3402	30th Nov. 1867	William Starkey.
MOULDINGS AND ARCHITECTURAL ORNAMENTS.			
An improved bench planing machine - - (*for working mouldings.*) (*Communicated by Joseph Jones.*)	3	1st Jan. 1867	Andrew Dwight Campbell.
Ornamenting, printing, cutting, creasing, bending, embossing and manufacturing articles from wood and other materials. (*for decorating buildings.*)	155	22nd Jan. 1867	Edward Tomlinson.
Manufacture and construction of ecclesiastical and architectural devices and decorations - -	184	24th Jan. 1867	William Phillips Phillips. George Phillips. Daniel Pearce.
Improvements in machinery for cutting, shaping and polishing mouldings and shapes of circular, oval or irregular curved forms in stone, wood or other materials, part of such improvements being applicable for veneering mouldings of similar forms.	604	4th March 1867	Robert Thompson.
Machinery or apparatus for working wood - -	1366	9th May 1867	Samuel William Worssam, jun^{r}.
Making frames for looking-glasses, pictures and mouldings.	1789	19th June 1867	Morris Lyons.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
MOULDINGS, &c.—*continued.*			
A new or improved material for decorative purposes	2632	19th Sept. 1867	Jesse Rust.
Improvements in ceiling cornices and centres, and other indoor ornaments of a similar nature, and in the mode of fixing the same.	2938	19th Oct. 1867	Francis William Waide.
Details and fittings of windows, doors and other similar contrivances applied to buildings and other structures - - - -	3206	12th Nov. 1867	James Carter. Thomas Chalmers.
Improvements in machinery for cutting or dressing stone and in apparatus connected therewith. (*forming mouldings.*)	3354	27th Nov. 1867	Charles Coates.
Improvements in the manufacture of fire-bricks, tiles and solid or hollow fire-lumps, and in the manufacture of retorts, pipes, crucibles or other hollow vessels, or moulds required to resist a high degree of heat, and also in the manufacture of ornamental bricks, tiles, quarries, trusses, bosses, vases, busts, figures, columns, capitals, bases, cornices, copings, tablets, finials, and other articles of an ornamental character employed in building and in architectural decorations.	3501	9th Dec. 1867	Henry Bessemer.
Bench planes and moulding tools - - - (*Communicated by Nelson Palmer.*)	3552	13th Dec. 1867	William Edward Newton.
MUSICAL INSTRUMENTS AND NOTATION; TURNING OVER LEAVES OF MUSIC, MUSIC STOOLS, DIGITORIUMS.			
Action of upright pianofortes - - -	31	4th Jan. 1867	John Henry Schucht.
Harmoniums and organs - - - -	41	7th Jan. 1867	Charles Kelly. Constant Laurent.
Manufacture or construction of stringed musical instruments.	198	25th Jan. 1867	William Pain.
Construction of pianofortes - - -	307	4th Feb. 1867	Jean Frédéric Philippi.
Apparatus used when learning and when practising to play on the pianoforte and other keyed musical instruments.	315	4th Feb. 1867	Immanuel Liebich.
Certain improvements in the construction of piano-fortes. (*Communicated by Francis Pivoda.*)	623	6th March 1867	William Edward Gedge.
Improved apparatus to be used in connection with piano-fortes.	778	18th March 1867	Henry Simms.
Harmoniums, organs and similar musical instruments.	896	27th March 1867	Alexander Findlay.
Wind musical instruments - - - - (*Communicated by Jules Legendre.*)	929	29th March 1867	Michael Henry.
Pianofortes - - - - -	1136	17th April 1867	Alfred Nicholson Wornum.
Clarionets, oboes, bassoons, and such like metal and wood wind musical instruments - -	1280	2nd May 1867	James Smyth. Samuel Kirby.
Certain improvements in pianos - - -	1376	9th May 1867	Auguste Herce.
Musical wind instruments called "Trombonettes"	1587	29th May 1867	Carlo Minasi.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
Musical Instruments, &c.—*continued.*			
Improvements in apparatus for supporting or holding music and other books, and for turning over the leaves of the same.	1619	31st May 1867	Thomas Porter.
Construction of pianofortes and harmoniums -	1634	3rd June 1867	Edward McLean.
Organs with two, three or four key-boards and separate pedal action.	1954	4th July 1867	Jacques Verreyt.
Stringed instruments having sound boards - (*Communicated by Joseph Henri Marchisio.*)	2298	10th Aug. 1867	Henri Adrien Bonneville.
Pianoforte actions - - - - -	2359	16th Aug. 1867	Thomas Jackson.
Method of and materials for manufacturing ammunition boxes, pontoons, baggage and other waggons and carriages, and various equipments for military, naval and civil purposes. (*cases for instruments.*)	2630	19th Sept. 1867	Thomas Charles Clarkson.
An improvement in the preparation of wood for increasing the sonorous quality and improving the tone of a piano, violin or other musical instrument to which the wood is to be applied in its construction. (*Communicated by William Henry May.*)	2904	16th Oct. 1867	William Edward Newton.
Pianofortes - - - - -	2939	19th Oct. 1867	Mason Johnston Matthews.
Improvements in clarionets, flutes, bassoons, saxhophones, sarrusophones and other keyed wind musical instruments - - - -	3044	29th Oct. 1867	James Smyth. Samuel Kirby.
Constuction of pianofortes - - - (*and tuning.*)	3079	1st Nov. 1867	James Gilmour.
Pianofortes - - - - - (*Communicated by Luigi Caldera, Ludovic Montu and Stefano Brossa.*)	3137	6th Nov. 1867	Alexander Melville Clark.
A new or improved combined harmonium and piano (*Communicated by Messrs. Louis Dorgal and Jules Guesne.*)	3165	9th Nov. 1867	John Edmond Castex.
Means of and apparatus for developing or extending the power or sound of pianofortes or other similar keyed instruments.	3255	16th Nov. 1867	Robert William Pearse.
Musical boxes - - - - -	3603	18th Dec. 1867	Onésime Aristide Hébert.
Nails, Spikes, Bolts, Rivets, Screws, Nuts, Washers and Dies; Angle Iron, T Iron, Brackets.			
An improved bolt - - - - -	118	17th Jan. 1867	William Stafford. WilliamPorterMcCullum.
Certain novel and improved combinations and arrangements of differential wheel gearing, and its application to various purposes - - (*for screw cutting.*)	125	18th Jan. 1867	Charles Frederick Cooke. John Standfield.
Improvements in rolling and shaping metals, and in the machinery or apparatus employed therein. (*bars for hexagon nuts.*)	196	25th Jan. 1867	William Gray.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
NAILS, &c.—*continued.*			
Certain improvements in machinery or apparatus to be employed in the manufacture of metallic bolts - - - - - - -	221	28th Jan. 1867	Eric Hugo Waldenstrom. Isaac Gray Bass.
An improved machine for cutting screws - - (*Communicated by Henry Bascom Brown.*)	269	31st Jan. 1867	Edward Thomas Hughes.
Machinery for forging nails and spikes - -	271	31st Jan. 1867	David Alexander Halket.
Improvements in the permanent way of railways and in screw bolts for the same, which latter are applicable to other similar purposes.	317	5th Feb. 1867	Perceval Moses Parsons.
Machinery for cutting and polishing metals - (*screws, nuts and bolts.*)	410	14th Feb. 1867	John Thompson.
Improvements in opening, closing and securing windows, doors and shutters, which improvements are also applicable to the opening, closing and securing the port holes of ships, and in the machinery or apparatus employed therein. (*construction of screws.*)	432	16th Feb. 1867	James Carter.
Cricket spikes to be made in steel, iron, brass or any other metal or material.	490	22nd Feb. 1867	Joseph Wareing.
Manufacture of iron and steel - - - (*ingots for nails.*)	546	27th Feb. 1867	Alexander Lyman Holley.
An improvement in screws and bolts - - (*Communicated by William Gorham Angell.*)	550	27th Feb. 1867	Alfred Vincent Newton.
Rising or adjustable brackets for supporting shelves and rods in shop windows, and for other purposes	618	5th March 1867	Edward Wells. William Pryor.
Improvements in machinery or apparatus for rolling spikes, nails, bolts or other similar articles, from rods, sheets or bars of iron or other metal or malleable substances, and in preparing, shaping, slitting and manufacturing same, and for the construction of furnaces for heating iron or for other similar purposes.	840	22nd March 1867	Samuel Sedgwick.
Nut tapping machine - - - - -	847	23rd March 1867	Emile Watteeu.
Manufacture of ships' sheathing, armour sheathing and fastenings. (*compound metal bolts.*)	856	23rd March 1867	Joseph Betteley.
Improvements in the permanent way of railways and in fastenings for the same.	868	26th March 1867	William Seaton.
Screws - - - - - - - (*Communicated by Valentine Fogerty.*)	876	26th March 1867	William Robert Lake.
Machinery used in the manufacture of screw nuts and washers.	892	27th March 1867	George Richard Postlethwaite.
Improvements in applying and fitting the tubes of multitubular boilers, condensers and other like capacities, and in apparatus for the same. (*forming the screw threads.*) (*Communicated by Victor Langlois.*)	988	2nd April 1867	William Clark.
Improvements in the manufacture of screws chiefly applicable for fixing armour plates.	1089	12th April 1867	Henry Patterson Boyd.
An improvement in the manufacture of boots and shoes, and other articles of leather or kindred substances. (*pegs of twisted wire.*) (*Communicated by Thomas Briggs Smith.*)	1256	1st May 1867	William Snell.
Means of locking screw nuts - - - (*Communicated by Charles Bouchacourt.*)	1292	3rd May 1867	Alexander Melville Clark.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
NAILS, &c.—*continued.*			
An improved nail-cutting machine - -	1453	16th May 1867	John Sadler.
Improvements in wood screws and in the means employed in their manufacture. (*Communicated by John Waldron Hoard and Solomon Whipple Young.*)	1763	17th June 1867	John Henry Johnson.
An improved method of securing the nuts of bolts	1780	18th June 1867	Rudolph Bodmer.
Certain improvements in machinery for making rivets.	2008	9th July 1867	Andrew Shanks.
An improvement in fastening wood to iron, applicable in securing the planking of composite ships to the iron frame, and for other similar purposes. (*bolts and nuts.*)	2057	12th July 1867	James Laing.
An improved construction of trenail - -	2271	6th Aug. 1867	Edward Joseph. William Parnacott.
Machinery for the manufacture of cut nails - (*Communicated by John Henry Geary.*)	2296	9th Aug. 1867	Richard Heathfield.
Machinery for rolling hoops, strips, angle bars and other bars of iron and steel.	2588	12th Sept. 1867	William Brown.
Improved apparatus applicable to turning and screw cutting. (*Communicated by William Thomas Cole.*)	2720	26th Sept. 1867	Alfred Vincent Newton.
Improvements in the manufacture of horse nails and other nails, and in machinery used therein -	2733	27th Sept. 1867	John Huggett. John Albert Huggett.
Manufacture of certain descriptions of nails -	2769	2nd Oct. 1867	Frank Parkes.
Railway fastenings - - - - -	2771	2nd Oct. 1867	Charles James Appleby.
Machinery for the manufacture of nails and spikes	2788	3rd Oct. 1867	George Mellor.
Machinery for making bolts - - - (*Communicated by Abram Alexander.*)	2808	5th Oct. 1867	William Robert Lake.
An improved mode of preparing iron for the manufacture of various articles where great strength and capability of resistance to tensile strain or torsion is required. (*for pins, &c.*) (*Communicated by Michel Pawlowitch Lwoff.*)	2865	11th Oct. 1867	William Edward Newton.
Screw bolts and nuts for securing fish plates and other objects. (*Communicated by Frederic Tudor.*)	2954	21st Oct. 1867	Charles Denton Abel.
A novel kind of nail or tack for upholstery and cabinet work. (*Communicated by Louis Gabriel Ragueneau.*)	2988	24th Oct. 1867	William Edward Gedge.
Making moulds for the manufacture of metallic screws.	3038	28th Oct. 1867	William Potts.
Method of and apparatus for securing nuts and bolts employed on the permanent way of railways. (*see* "RAILWAYS.")	3054	30th Oct. 1867	John Maddocks.
Mode of and instruments or tools for securing the metal bolts employed in the construction of timber ships and other structures. (*cutting the thread on the bolts.*) (*Communicated by Johann Carl Hammer.*)	3082	2nd Nov. 1867	Matthew Augustus Soul.
Improvements in or applicable to that apparatus known as "Giffard's injector," and in the method of and machinery or tools for making the same. (*tools for screw cutting.*)	3169	9th Nov. 1867	James Gresham.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
NAILS, &c.—*continued.*			
Machinery for the manufacture of cut nails - (*Communicated by Cyrus Dexter Hunt.*)	3246	15th Nov. 1867	Richard Heathfield.
Manufacture of nuts and bolts - - -	3381	28th Nov. 1867	Edward Hammond Bentall.
An improved brake-washer - - - (*Communicated by Arthur Dillon-Corneck.*)	3399	30th Nov. 1867	William Edward Gedge.
Construction and manufacture of mechanism for expanding tables and other expanding furniture. (*making the nuts.*)	3410	30th Nov. 1867	Joseph Fitter.
Machinery for cutting and heading nails - -	3651	23rd Dec. 1867	Matthew James Rice.
OIL-CLOTHS, FLOOR-CLOTHS, TABLE-COVERS AND FURNITURE-COVERS; RICK-CLOTHS AND WAGGON COVERS.			
Manufacture and treatment of varnished or patent leather, oil or varnished cloth and other like materials.	446	19th Feb. 1867	Anne Amelie Fousset.
Improved apparatus and mechanism to be used for awnings or coverings for omnibuses and other vehicles - - - -	503	23rd Feb. 1867	Henry James Cole. William Chisholm Horton.
Certain improvements in the method and means of securing buttons and buttonholes, hooks and eyes, to wearing-apparel and other objects to which such fastenings are applied. (*furniture covers.*)	873	26th March 1867	James Hesse.
"Tilloting" or wrappers for covering woollen fabrics known as "long ells" and Spanish stripes, suitable for the India and China markets.	1090	12th April 1867	Joseph Walton Wallis.
An improved apparatus for preventing the access of insects to the interior of dwellings, and to pictures, mirrors and articles of furniture. (*net covers.*) (*Communicated by John George De Coursey.*)	1238	29th April 1867	John Henry Johnson.
Improvements in the preparation of hose for conveying water, which improvements are also applicable for the preparation of woven fabrics for cart covers and other similar purposes.	2224	1st Aug. 1867	James Quin.
Manufacture of appliqué embroidery on tulle, muslin or similar fabrics in various colours and designs. (*for table and furniture covers.*) (*Communicated by Jean François Planus, jeune.*)	2510	5th Sept. 1867	Arthur Charles Henderson.
A new or improved material to be used as a substitute for oiled silk, bladders, gut-skins, india-rubber, and other waterproof materials and leather.	2604	14th Sept. 1867	John Jeyes.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
OIL-CLOTHS, &c.—*continued.*			
Improvements in the treatment and application of the residuum which results from the clarification and purification of cotton seed oil and other vegetable drying oils, and of the residuum which results from the distillation or other analogous treatment of the said material, for the manufacture and preparation of isolating preservative and anti-corrosive compositions. (*for floor-cloths, table covers, &c.*)	2656	21st Sept. 1867	Giacomo Eduardo Marchisio.
An improved formation of wrapper or bale-cloth specially adapted for packing combed wool. (*Communicated by Houbart-Caruel.*)	2802	5th Oct. 1867	William Edward Gedge.
Mats and matting - - - - (*for covering floors.*)	3092	2nd Nov. 1867	William Cooke. Walter Francis.
Improvements in treating oils and spirits, and in apparatus to be used for this purpose. (*for oil-cloth making.*)	3191	11th Nov. 1867	Francis Louis de Gerbeth.
Certain improvements in the manufacture of waterproof or liquid-proof paper or glazed paper or fabrics. (*for table covers.*)	3437	3rd Dec. 1867	John Thorpe.
Treatment of paper and certain woven fabrics for rendering them ornamental and durable as articles of dress, and for decorative and ornamental purposes. (*furniture covers.*)	3535	12th Dec. 1867	Edward Reed Sintzenich.
OILING OR LUBRICATING; MATERIALS FOR OILING; OIL-CANS AND LUBRICATORS.			
An improved apparatus for lubricating carriage axles. (*Communicated by John Burt Powell.*)	96	14th Jan. 1867	George Haseltine.
Improvements in the treatment of the residual matters resulting from and obtained in the purification and distillation of mineral or hydrocarbon oils, and also in the treatment of coal tar and various waste or other alkaline and lime substances, for the purpose of utilizing the same. (*forming lubricating grease.*)	211	26th Jan. 1867	John James Lundy.
Self-oiling spindles for spinning, doubling and winding frames. (*Communicated by Francis Rabbeth and John Edwin Atwood.*)	298	2nd Feb. 1867	John Garrett Tongue.
Preparation of oils for illuminating, lubricating and other purposes for which they may be applicable	344	7th Feb. 1867	George Edward Pain. Charles Corroy.
Lubricating apparatus - - - -	467	21st Feb. 1867	William Sutton Gamble.
An improved lubricator or tallow cup - -	507	23rd Feb. 1867	John Bates.
An improved self-lubricating axle for carriages and other vehicles. (*Communicated by Silas Safford Putnam.*)	593	2nd March 1867	George Haseltine.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
OILING, &c.—*continued.*			
Process of and apparatus for cleaning waste and other substances, and preventing the adhesion of sediment in steam-boilers and pipes. (*lubricating pistons, &c.*)	774	18th March 1867	John Smith.
An improved lubricator for oiling axles and other moving pieces of machineries.	1035	6th April 1867	Jules de la Coux des Roseaux.
Certain improvements in lubricators to be used for the bottom ends of vertical spindles or shafts.	1224	27th April 1867	Joseph Wilson Lowther.
An improved packing for stuffing-boxes. (*useful for lubricating.*) (*Communicated by Ivon Bruce Miller.*)	1234	29th April 1867	George Davies.
Lubricators for the supply of mineral and other oils to bearings and journals of shafts, pit tubs and other parts requiring lubrication.	1261	1st May 1867	Ferdinand Jossa.
Looms for weaving - - - - (*lubrication of driving pulley.*)	1269	1st May 1867	Erastus Brigham Bigelow.
Certain improvements in receptacles for containing and emitting oil or lubricating liquids.	1337	7th May 1867	John Booth.
An improved system of tenders for locomotives - (*lubricators for cylinders and slide boxes.*)	1347	7th May 1867	George Krauss.
An improved mode of lubricating the stuffing boxes of steam-engines and pumps, and of rendering the packing for such or other machines or apparatus waterproof and more durable than heretofore. (*Communicated by Abraham Littlewood, Francis W. Bloodgood and Henry Dirks Ostermoor.*)	1378	9th May 1867	William Edward Newton.
An improved lubricator - - - - (*Communicated by Edwin Faull.*)	1523	22nd May 1867	William Brookes.
Boring metals in the solid - - - - (*and lubricating drills.*)	1550	24th May 1867	Thomas Greenwood.
Improvements in the production of motive-power and in the apparatus connected therewith. (*lubricating the cylinder and piston.*) (*Communicated by Jacques Belou.*)	1575	28th May 1867	Henri Adrien Bonneville.
Machinery for oiling wool or fibre to prepare it for carding, combing or other treatment -	1758	15th June 1867	Louis John Crossley. Joseph Sunderland.
Lubricators for lubricating rotating shafts and other moving surfaces.	1928	2nd July 1867	Adolph Schwartz.
An improved lubricating compound - - (*Communicated by Heinrich Waltjen.*)	1950	3rd July 1867	Adolphus Edward Herrmann.
Self-lubricating bolsters for spinning machines - (*Communicated by Erastus Newton Steere.*)	2117	19th July 1867	George Tomlinson Bousfield.
An improved self-acting lubricator - -	2404	22nd Aug. 1867	Samuel Lynes.
Lubricating shafts and other frictional surfaces -	2525	6th Sept. 1867	Thomas Hodson. William Mather. James Risley.
Improvements in the bearings of "hydro extractors," and in the method of supplying lubricating matter to the same, applicable also to the lubricating of the bearings of other machinery -	2569	11th Sept. 1867	Edward Kenworthy Dutton. Sam Mason, jun^{r}.
Improvements in the treatment of jute and in oils or preparations for softening the fibres thereof.	2664	21st Sept. 1867	James Baird.
An improved lubricating packing - -	2746	28th Sept. 1867	Thomas Silver.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
OILING, &c.—*continued.*			
Improvements in locomotive engines, vehicles and appendages thereto, for better and safer working on railways, tramways and common roads.	2907	17th Oct. 1867	William Bridges Adams.
Machinery for preparing and spinning cotton or other fibrous substances.	2947	19th Oct. 1867	Ellis Butterworth.
Spinning machinery - - - - (*Communicated by James Eaton.*)	2996	24th Oct. 1867	John Henry Johnson.
New and useful improvements in lubricating boxes (*Communicated by Isaac Pennington Wendell.*)	3195	12th Nov. 1867	Henri Adrien Bonneville.
Machines for pressing or moulding bricks, tiles or other blocks. (*brush for oiling.*) (*Communicated by John North.*)	3196	12th Nov. 1867	Henri Adrien Bonneville.
Improvements in gibs applicable to the cross heads and other parts of engines and other machinery, also in the means employed for lubricating the same and other sliding or frictional surfaces. (*Communicated by William Armstrong Devon.*)	3309	22nd Nov. 1867	John Garrett Tongue.
Certain new and useful improvements in the running mechanism of car and carriage trucks of any nature.	3363	27th Nov. 1867	Samuel Augustus Chase.
An improved lubricating apparatus - - (*Communicated by Gardner Waters and David Waters.*)	3403	30th Nov. 1867	William Robert Lake.
Steps of spindles for spinning, roving, slubbing, doubling and twisting frames - - -	3432	3rd Dec. 1867	James Collingham. Thomas Ellison Smith.
Means of and apparatus for lubricating certain parts of doffing knife apparatus.	3448	4th Dec. 1867	Joseph Newton.
Improvements in the treatment of fibrous materials and in apparatus used therein. (*oiling before carding.*)	3510	10th Dec. 1867	John Watson Burton.
Spinning and twisting frames known under the denomination of "cap frames" and "flyer frames" - - - - - (*lubricating spindles.*)	3533	12th Dec. 1867	James Collingham. Thomas Ellison Smith.
An improved mode of reducing the friction of revolving and sliding furnaces.	3628	21st Dec. 1867	Edward Lord.
Machinery or apparatus for spinning cotton and other fibrous materials. (*Communicated by James Eaton.*)	3719	31st Dec. 1867	John Henry Johnson.
OILS FROM SEEDS; ANIMAL AND VEGETABLE OILS, FATTY AND OILY MATTERS.			
Improvements in means or apparatus employed for securing oil or other liquids in cans and other vessels, which improvements also facilitate the drawing off of such liquids from the vessels in which they are contained.	335	6th Feb. 1867	William Rigg.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
OILS FROM SEEDS, &c.—*continued.*			
Apparatus for boiling fats, oils and bones, whereby to neutralize and avoid the escape of noxious gases.	515	25th Feb. 1867	William Barratt.
Process of and apparatus for cleaning waste and other substances, and preventing the adhesion of sediment in steam-boilers and pipes. (*recovering oil and grease.*)	774	18th March 1867	John Smith.
Improvements in the preparation and application of isolating compositions for the protection of metallic surfaces from oxidation, and for the preservation of wood and other materials, and in the preparation of the residue of vegetable oils to be employed for such purposes. (*obtaining drying oil.*)	814	21st March 1867	Giacomo Eduardo Marchisio.
Apparatus for expressing oils and fatty matters, and for forming and marking the cake produced in the manufacture.	967	1st April 1867	John Harker.
Extraction of oils from vegetable substances -	1472	18th May 1867	Thomas Richardson.
A new or improved method for obtaining an essential oil applicable as a curative agent or medicine in the treatment of inflammatory joint diseases, rheumatism, sprains, bruises and similar ailments. (*Communicated by Lachlan Jamieson.*)	1617	31st May 1867	Frederick William Dolman.
Apparatus to be employed in expressing oils and fatty matters.	1716	11th June 1867	James Thom.
A new metallic zinc paint - - - - (*and alloys used as oil filters.*)	1845	25th June 1867	James Webster.
An improved method of and apparatus for extracting fatty matters from and for scouring wool and other fibrous substances and textile fabrics, by the use of sulphuret of carbon, and for regaining the sulphuret used in such operation. (*see* "WASHING.")	1887	28th June 1867	Charles Otto Heyl.
An improved method of and apparatus for extracting oil or fatty matter from cotton or woollen waste, shoddy, mungo, rags and analogous substances, by means of sulphuret of carbon.	1897	29th June 1867	Charles Otto Heyl.
Treatment and purification of oils - - - (*Communicated by Felix Asselin.*)	2100	17th July 1867	John Henry Johnson.
Improved apparatus for extracting oils from oleaginous seeds and nuts, and making oil cake or compound cake for cattle feeding.	2331	13th Aug. 1867	John Fawcett.
Improvements in the preparation of oils for illuminating or other purposes, and in the arrangement or construction of the lamps employed for burning the same. (*Communicated by Carl Wilhelm Herbst.*)	2648	20th Sept. 1867	John Garrett Tongue.
Improvements in the treatment and application of the residuum which results from the clarification and purification of cotton seed oil and other vegetable drying oils, and of the residuum which results from the distillation or other analogous treatment of the said material, for the manufacture and preparation of isolating preservative and anti-corrosive compositions.	2656	21st Sept. 1867	Giacomo Eduardo Marchisio.
Improvements in the treatment of jute and in oils or preparations for softening the fibres thereof.	2664	21st Sept. 1867	James Baird.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
OILS FROM SEEDS, &c.—*continued.*			
Treatment of paraffine, fatty and resinous matters (*Communicated by Leon Krafft.*)	2731	27th Sept. 1867	Leo de La Peyrouse.
Improvements in apparatus applicable to the conversion of cereal and vegetable substances into saccharine matter, in treating and purifying saccharine substances extracted from malt, fruits and vegetables, in treating fatty matters, and in the manufacture of chemical products - -	2760	1st Oct. 1867	George Allibon. Alexandre Manbré.
Improved modes of and means for curing, drying, preserving and packing meat, fruit, vegetables and other perishable substances. (*securing the tallow.*) (*Communicated by Daniel E. Somes.*)	3006	25th Oct. 1867	William Robert Lake.
Vessels and apparatus for the preserving and more convenient use of unguents.	3378	28th Nov. 1867	James Murdoch Napier.
An improved mode of treating cotton seed to obtain oil therefrom, and in machinery employed therein - - - - -	3388	29th Nov. 1867	Thomas Rose. Robert Emerson Gibson.
OILS OF TAR, BITUMEN AND RESIN; NAPHTHA, PARAFFINE, &c.; MINERAL OILS; HYDROCARBONS; PHOSPHORUS.			
A new specimen of oil for lighting, by the use of purified resin oil combined with petroleum, paraffin, schiste and any other mineral oil, called phœnix and composite oil - - -	23	3rd Jan. 1867	Charles Corroy. George Edward Pain. John Kull.
Improvements in treating benzole and other hydrocarbon liquids, and in making such liquids non-explosive, and of generating an illuminating gas therefrom. (*Communicated by John Johnson.*)	64	10th Jan. 1867	Lewis Hand.
An improved process for hardening, bleaching and sweetening crude paraffin.	152	21st Jan. 1867	John Rowley.
Improvements in the treatment of the residual matters resulting from and obtained in the purification and distillation of mineral or hydrocarbon oils, and also in the treatment of coal tar and various waste or other alkaline and lime substances, for the purpose of utilizing the same.	211	26th Jan. 1867	John James Lundy.
Improvements in effecting the distillation of coal, shale, wood, peat and other bituminous or carbonaceous substances - - -	284	1st Feb. 1867	Jacob Buhrer. Astley Paston Price.
Improvements in means or apparatus employed for securing oil or other liquids in cans and other vessels, which improvements also facilitate the drawing off of such liquids from the vessels in which they are contained.	335	6th Feb. 1867	William Rigg.
Preparation of oils for illuminating, lubricating and other purposes for which they may be applicable - - - - -	344	7th Feb. 1867	George Edward Pain. Charles Corroy.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
Oils of Tar, &c.—*continued.*			
Transporting, warehousing and barrelling petroleum, oil or liquids lighter than water.	583	2nd March 1867	Max Gossi.
Hydro-carbon oils used for safety and other lamps.	611	5th March 1867	Alexander Septimus Macrae.
Improvements in the utilization of mineral and other oils for the production of heat, and in the apparatus employed therefor.	616	5th March 1867	James Edward Duyck.
An improved apparatus for the promotion of economy in the combustion of gas, petroleum and other oils. (*see* "Lamps.") (*Communicated by Oscar Louis and Jean Hoedemaker.*)	692	11th March 1867	Edward Thomas Hughes.
Compositions for treating fluids employed for illuminating purposes. (*Communicated by Hiram Baker Wellman.*)	965	1st April 1867	Charles Denton Abel.
Burning petroleum, creosote, gas tar, and other such fluid bodies capable of being used as fuel. (*see* "Fuel.")	998	3rd April 1867	John Augustus Bouck.
Improvements in the manufacture of phosphorus, and in economizing residual products of the said manufacture.	1064	10th April 1867	Jacob Hort Player.
Apparatus for burning petroleum and other combustible fluids. (*see* "Furnaces.")	1180	23rd April 1867	Samuel Joseph Mackie.
An improved mode of lubricating the stuffing boxes of steam-engines and pumps, and of rendering the packing for such or other machines or apparatus waterproof and more durable than heretofore. (*application of paraffine.*) (*Communicated by Abraham Littlewood, Francis W. Bloodgood and Henry Dirks Ostermoor.*)	1378	9th May 1867	William Edward Newton.
Improvements in burning all hydro-carbon oils, such as creosote, petroleum, paraffin oil, shale oil, gas tar, and other similar products capable of being used as fuel.	1487	20th May 1867	Thomas Metcalf.
Purification of paraffine - - - - -	1646	4th June 1867	Edward Meldrum.
Stills for petroleum, paraffine oil, tar, turpentine and like bodies.	1808	21st June 1867	John William Perkins.
Utilization of a certain waste material obtained in the manufacture of hydrocarbon liquids.	1888	28th June 1867	John Carrington Sellars.
A process of uniting or cementing and compressing sawdust, shavings and other small particles of wood, for the purpose of converting the same into charcoal, and utilizing the naphtha, tar and other residuary products of such conversion.	1983	6th July 1867	William Harris.
Improvements in the mode of distilling or separating the more volatile portions of petroleum and other mineral oils, and in means or apparatus for ascertaining the igniting and explosive point of such oils.	2175	27th July 1867	Edward Alexander Rippingille.
Fire lighters also applicable for fuel generally - (*application of naphthaline.*)	2377	19th Aug. 1867	John Hooker. Frederick Braby.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
OILS OF TAR, &c.—*continued.*			
A new or improved process for the direct production of phosphorus for industrial purposes. (*Communicated by Edouard Aubertin and Lèopold Boblique.*)	2458	29th Aug. 1867	Charles Denton Abel.
Treatment and preparation of mineral oils and spirits for illuminating and other purposes. (*Partly communicated by Henry Chadburn.*)	2606	16th Sept. 1867	George Pickin.
Improvements in the preparation of oils for illuminating or other purposes, and in the arrangement or construction of the lamps employed for burning the same. (*Communicated by Carl Wilhelm Herbst.*)	2643	20th Sept. 1867	John Garrett Tongue.
Bleaching and purifying paraffin - - -	2721	26th Sept. 1867	John Fordred.
Treatment of paraffine, fatty and resinous matters - (*Communicated by Leon Krafft.*)	2731	27th Sept. 1867	Leo de La Peyrouse.
Obtaining chlorine, sodium, potassium, phosphorus and their compounds.	2801	5th Oct. 1867	James Anderson.
Improvements in the treatment of hydrocarbons for the production of gas sufficiently permanent to be stored for lighting and heating purposes, and especially in the treatment of the hydrocarbons and other products obtained by distilling or carbonizing coal, wood and other carbonaceous materials, including those obtained in the manufacture of gas and in the distillation of coal tar.	2893	15th Oct. 1867	Adam Aitchison.
Improvements in treating oils and spirits, and in apparatus to be used for this purpose. (*producing spirit similar to turpentine.*)	3191	11th Nov. 1867	Francis Louis de Gerbeth.
Safety cans or vessels for containing, measuring or storing petroleum oil and other volatile inflammable liquids - - - -	3344	26th Nov. 1867	James Hinks. Joseph Hinks.
Improvements in utilizing mineral and other oils for generating steam, and in the means or apparatus for effecting the same. (*see* "FUEL.")	3434	3rd Dec. 1867	John Graham Hope.
OPTICAL INSTRUMENTS; TELESCOPES, MICROSCOPES, STEREOSCOPES, LENSES; OPTICAL ILLUSIONS.			
Manufacture of lenses for photographic cameras and various optical instruments.	174	23rd Jan. 1867	Thomas Ross.
An improved process of preparing raw hide for the manufacture of various articles. (*eye-glass frames.*)	394	12th Feb. 1867	William Henry Towers.
The "chromo-eidotrope" for dissolving views and optical effects.	522	26th Feb. 1867	William Robert Hill.
An improved mode of and means for producing optical illusions. (*Communicated by Milton Bradley.*)	629	6th March 1867	Henry Watson Hallett.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
Optical Instruments, &c.—*continued.*			
A new and useful process whereby leather wholly or partially tanned, or animal tissue of any nature, is made hard, semi-elastic and transparent. (*for making eye-glass frames.*)	651	7th March 1867	William Henry Towers.
Producing transparent pictures for exhibition in magic lanterns, by a cheaper and easier method than heretofore.	705	12th March 1867	Thomas Hatton.
Manufacture of spectacle frames - - -	1541	24th May 1867	Henry Blackham.
Apparatus applicable to the microscope and other optical instruments - - - - -	1570	28th May 1867	Michael Loam. Francis Henry Fearns.
An improved camera obscura - - -	1676	7th June 1867	Jean Petrzywalski.
Framing of lighthouse lanterns and of the optical apparatus of lighthouses.	2054	12th July 1867	David Marr Henderson.
Optical apparatus designed to demonstrate the persistence of vision.	2563	10th Sept. 1867	Charles Sutton.
A polarizing kaleidoscope - - - -	2634	19th Sept. 1867	John Huggins.
An improved fan - - - - - (*combined with hand glass.*)	2737	28th Sept. 1867	Louis Laine.
A telescopic apparatus applicable as a temporary or stationary observatory for temporary bridges, building and other purposes. (*see* "Building.")	2969	22nd Oct. 1867	William Beale.
An improved apparatus for protecting the eyes from wind, dust, snow and the inclemency of the weather.	3116	5th Nov. 1867	Henry Adeane.
A revolving apparatus for exhibiting figures and other objects in apparent motion. (*Communicated by William W. Rose.*)	3156	8th Nov. 1867	Henry Jewett.
An invention for the purpose of producing an optical illusion of apparently beheading or otherwise dismembering a human being.	3617	19th Dec. 1867	Joseph Simmons.
Ovens and Kilns.			
Pottery kilns - - - - -	60	9th Jan. 1867	Henry Doulton.
Improvements in bakers' and other ovens, and also in scrap and other furnaces.	80	11th Jan. 1867	John Tomlinson.
Improvements in pipe moulding and casting apparatus, and in black washing the moulds. (*drying oven.*) (*Communicated by George Ross.*)	99	14th Jan. 1867	William Clark.
Mode of and machinery for manufacturing bricks, tiles and other articles of clay. (*ovens.*)	151	21st Jan. 1867	Robert Kunstmann.
Improvements in the heating of malt kilns and other apparatus of a similar character, and the warming of the interiors of churches and other large buildings, which invention is also applicable to causing the consumption of smoke from open fire-places.	249	30th Jan. 1867	Thomas Prideaux.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
Ovens, &c.—*continued.*			
Lime kilns - - - - - -	259	30th Jan. 1867	William Lee.
Construction and arrangement of kilns and ovens -	290	2nd Feb. 1867	John Gilbert Robinson.
Improvements in gas cooking apparatus, and in steaming, baking, boiling and roasting apparatus - - - - - - -	439	18th Feb. 1867	William Hill. Henry Charles Wilberforce.
Improvements in burning or calcining limestone and cement, and in ovens or apparatus employed for that purpose - - - - -	471	21st Feb. 1867	Henry Wadkin. Charles Shepherd.
Ovens and kilns for drying and burning bricks and other articles.	562	28th Feb. 1867	Jacob Buhrer.
Steam cooking and baking apparatus - -	746	15th March 1867	William Henry Graveley. James Ewing.
Improvements in oxidizing minerals, ores and metals, in reducing oxides of metals, in separating certain metals from each other, in kilns, furnaces or other apparatus for these purposes, and in the treatment of the products obtained therefrom.	1042	6th April 1867	William Henderson.
Improvements applicable to kitchen ranges, part of which improvements is also applicable for the prevention of down draught in other fireplaces. (*construction of the oven.*)	1305	4th May 1867	Robert Russell.
Kilns for burning limestone, cement and other materials.	1445	16th May 1867	Philip Arthur de Berenger.
Kilns or furnaces particularly applicable for burning plaster of Paris. (*Communicated by Paul Louis Daviau.*)	1537	23rd May 1867	Clinton Edgcumbe Brooman.
Improvements in machinery or apparatus for separating liquids or moisture from substances, and also for revivifying and cooling animal charcoal and other substances, and for treating sugar. (*charcoal kilns.*)	1707	10th June 1867	William Orr.
Hot-air ovens for baking bread, biscuits, pastry, cooking, drying or desiccating flour and other materials.	1853	25th June 1867	Henry Veillon.
Apparatus employed in the heating of bakers' ovens.	2348	15th Aug. 1867	John Cosgrave.
Improvements in furnaces and in processes and apparatus in connection therewith, principally applicable to metallurgical operations.	2395	21st Aug. 1867	Charles William Siemens.
Improvements in bread ovens and in their combination with various apparatus for the manufacture of bread. (*Communicated by Thomas Caruso and Joseph Augustin Garau.*)	2650	20th Sept. 1867	Samuel Dreyfous.
A new or improved method and apparatus for converting the gaseous products of combustion into combustible gases. (*for ovens or kilns.*) (*Communicated by Nicolas Lebedeff.*)	2694	25th Sept. 1867	Charles Denton Abel.
Improvements in and applicable to ovens, boilers and other apparatus in which heat is employed. (*Communicated by Alfred Charles Joly de Marval.*)	2780	3rd Oct. 1867	William Spence.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
OVENS, &c.—*continued.*			
An improved apparatus for drying corn, malt or other similar substances. (*furnace and chamber.*)	2804	5th Oct. 1867	John Stonehouse Williamson.
Improvements in stoves for consuming gas and other fuel, and in ovens to be used therewith -	2873	12th Oct. 1867	Richard Canham. James Thomson.
Kilns for burning pipes, tiles, bricks, pots and earthenware.	2991	24th Oct. 1867	Henry Adcock.
New and useful machinery for making, drying and burning bricks and tiles, applicable in part to baking pottery ware.	3220	13th Nov. 1867	Peter Edward Bland.
Improvements in coating metals and metallic articles for the purpose of protecting or preserving the same from oxidation and decay.	3288	20th Nov. 1867	Baroness Camille de Lavenant.
Gas retort ovens and furnaces - - - (*Communicated by John Olof Wallin.*)	3554	14th Dec. 1867	Henry Atkinson.
Means of and apparatus for obtaining and applying hydrogen gas to the furnaces of steam-engines, boilers, and kilns for the manufacture of bricks and lime.	3580	16th Dec. 1867	James Standfield.
Improvements in furnaces for smelting glass or the materials employed therein, and for consuming smoke. (*and kilns*).	3702	30th Dec. 1867	James Davison.
OXIDATION AND INCRUSTATION (*Preventing and Removing*).			
Apparatus for removing the scum from the surface of the water in steam-boilers.	15	3rd Jan. 1867	John William Kenyon.
Tubular steam-boilers - - - (*retarding incrustation.*)	76	11th Jan. 1867	James Howard. Edward Tenney Bousfield.
An improved process for vitrifying iron, cast-iron and steel.	322	5th Feb. 1867	Joseph Ballouhey.
An improved composition for coating or covering the surface of iron, wood, stone, brickwork and other substances or materials, to prevent oxidation and decomposition thereof.	657	8th March 1867	James Turner.
A method of protecting the outer surface or external parts of iron ships from corrosion or from animal or vegetable matter - - -	745	15th March 1867	Joseph Westwood. Robert Baillie.
Process of and apparatus for cleaning waste and other substances, and preventing the adhesion of sediment in steam-boilers and pipes.	774	18th March 1867	John Smith.
Improvements in the preparation and application of isolating compositions for the protection of metallic surfaces from oxidation, and for the preservation of wood and other materials, and in the preparation of the residue of vegetable oils to be employed for such purposes.	814	21st March 1867	Giacomo Eduardo Marchisio.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
OXIDATION, &c.—*continued.*			
Improvements in apparatus for regulating and transmitting electric currents, more especially designed for use in connection with telegraphic recording instruments for long submarine lines. (*preventing corrosion of the poles.*)	1053	8th April 1867	George Little.
A new or improved enamel for enamelling metals and stones, to prevent rust, corrosion and incrustation - - - - -	1118	15th April 1867	The Rev^{d}. Joseph Oakden. Joseph Pickin.
Preventing incrustations in steam-boilers - (*Communicated by Monsieur Elie Ducros.*)	1237	29th April 1867	Philippe Jean Jacques Allibert.
Apparatus for generating and condensing steam - (*preventing deposits.*)	1419	13th May 1867	Edward Field.
Preventing the incrustation of steam-boilers -	1586	29th May 1867	Jean François Nicolas Biesman Simons.
Covering buckles, saddle-trees, turrets, hooks and other metallic trimmings for carriages and harness, with a coating of vulcanized or hard rubber, gutta-percha or other gum. (*protecting from rust.*)	1630	1st June 1867	Andrew Albright.
Projectiles and cartridges for ordnance and fire-arms. (*preventing corrosion.*)	1806	20th June 1867	John Webster Cochran.
Improvements in compositions for preventing the fouling of the bottoms of ships, floating docks and other similar structures, and in the mode or means of applying the said compositions.	1924	2nd July 1867	George Augustus Frederick Fowke.
Treatment of apparatus employed in the manufacture and materials used in the purification of gas - - - - - (*"scurfing" retorts.*)	1931	3rd July 1867	John Somerville. Robert Elsdon.
Mode of applying metal sheathing to iron ships, caissons and floating docks, and other iron constructions subject to corrosion.	1961	4th July 1867	William Day.
Improvements in the manufacture of illuminating gas and in apparatus employed in the said manufacture. (*preventing deposit of carbon.*) (*Communicated by George A. McIlhenny.*)	1967	4th July 1867	William Robert Lake.
Preserving iron from oxidation - - - (*Communicated by Monsieur Alfred Delcelier.*)	2142	23rd July 1867	Hector Auguste Dufrené.
The application of a certain vegetable powder for removing and preventing incrustations in boilers	2294	9th Aug. 1867	Henry Augustus Avery. Georges Penabert.
Mode of covering and protecting iron plates from the action of sea-water.	2413	22nd Aug. 1867	John McIntyre.
Improvements in the treatment and application of the residuum which results from the clarification and purification of cotton seed oil and other vegetable drying oils, and of the residuum which results from the distillation or other analogous treatment of the said material, for the manufacture and preparation of isolating preservative and anti-corrosive compositions.	2656	21st Sept. 1867	Giacomo Eduardo Marchisio.
Marine steam-boilers - - - - (*removing scale and deposit.*)	2777	2nd Oct. 1867	Charles Mace.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
OXIDATION, &c.—*continued.*			
A new or improved composition to be used to prevent the oxidation of iron, the fouling of ships' bottoms and other submerged things, and preserving wood from decay and from worms, and also preserving iron and wood exposed to the action of the atmosphere.	2848	10th Oct. 1867	Thomas Blackhurst.
Improved means of preventing incrustation in boilers and other vessels in which water is heated.	2997	24th Oct. 1867	Charles Weightman Harrison.
An improved mode of preventing incrustation in and removing it from steam-boilers. (*Communicated by Josiah Johnson Allen.*)	3051	30th Oct. 1867	George Davies.
Mode of applying metal sheathing to composite ships with iron fastenings. (*preventing corrosion.*)	3095	4th Nov. 1867	William Day.
Covering buckles, saddle-trees, turrets, hooks and other metallic trimmings for carriages and harness, with a coating of vulcanized or hard rubber, gutta-percha or other gum. (*preventing rust.*) (*Communicated by Andrew Albright.*)	3258	16th Nov. 1867	William Robert Lake.
Improvements in evaporating apparatus and in utilizing the steam derivable from such apparatus. (*preventing incrustation in boilers.*)	3277	19th Nov. 1867	William Anderson.
Improvements in coating metals and metallic articles for the purpose of protecting or preserving the same from oxidation and decay.	3288	20th Nov. 1867	Baroness Camille de Lavenant.
Prevention of incrustation in steam-boilers -	3483	7th Dec. 1867	Richard Boulton Jones. William Powell.
An improved process for the reduction of tin so as to render it applicable for coating metals and for other purposes. (*preserving pipes from oxidation.*) (*Communicated by Jules Fenquiéres.*)	3517	11th Dec. 1867	Alexander Melville Clark.
Means for preventing and removing incrustation in steam-boilers - - - - -	3586	17th Dec. 1867	William Ross. Alfred Long.
Thread-polishing machines - - - (*preventing oxidation.*)	3710	31st Dec. 1867	Gilbert McCulloch.
PAINTING, COLOURING AND VARNISHING; PAINTS, COLOURS, VARNISHES, GLAZES AND LACQUER.			
Metallic zinc paint - - - - -	82	12th Jan. 1867	James Webster. Edward Deane. William Rumble.
Improvements in the means whereby tools or operating implements, instruments, appliances or parts of machinery or apparatus may be moved to and worked at various parts of articles or surfaces to be operated on by the same. (*varnishing.*) (*Communicated by Norbert Belvallette.*)	105	15th Jan. 1867	Michael Henry.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PAINTING, &c.—*continued.*			
Tinting or colouring the surface of paper or other materials or fabrics. (*Communicated by George Streat.*)	121	17th Jan. 1867	William Edward Newton.
Gilding, bronzing and colouring engraved, embossed and cut glass, and all other kinds of glass.	265	31st Jan. 1867	Edward Hugh Hughes.
Treatment of ores of lead for the purpose of obtaining salts and colours of the same - - (*white lead.*)	325	6th Feb. 1867	James Wright. Thomas Cobley.
An improved paint - - - - (*Communicated by Jean Baptiste Terrin Lucien Lassabe and Louis Soles, jun^r.*)	327	6th Feb. 1867	William Edward Gedge.
Preparation of oils for illuminating, lubricating and other purposes for which they may be applicable - - - - - (*drying oil for painting.*)	344	7th Feb. 1867	George Edward Pain. Charles Corroy.
An improved varnish or composition to be applied to healds of looms for weaving and for other similar uses.	744	15th March 1867	James Robinson Parkinson.
An improved mode of and means for producing pictures, designs, letters and other characters or figures upon glass, metal, wood and other materials. (*see* "PRINTING.")	732	13th March 1867	Edward Lee.
Lithographic stone grinding, graining, polishing and ink and colour grinding apparatus.	775	18th March 1867	Thomas William Nicholson.
Improvements in the preparation and application of isolating compositions for the protection of metallic surfaces from oxidation, and for the preservation of wood and other materials, and in the preparation of the residue of vegetable oils to be employed for such purposes. (*forming varnishes.*)	814	21st March 1867	Giacomo Eduardo Marchisio.
An improved machine for painting metallic surfaces, more especially designed for painting bands or hoops.	894	27th March 1867	Henry Fassman.
A new or improved painters' easel - -	1073	11th April 1867	Robert Day.
Compositions to be applied as coatings to preserve the surfaces of metals, wood, stone and all such like materials.	1113	13th April 1867	Robert Alexander.
Apparatus for mixing paint, putty and other like substances - - - - -	1185	24th April 1867	James Smalley. Samuel Bridge.
Manufacture of white lead - - - (*Communicated by Thomas Mara Fell and Ambrose George Fell.*)	1464	17th May 1867	William Robert Lake.
An improved mode of producing chloride or oxychloride of lead, and treating the same for manufacturing white lead. (*Communicated by Thomas Mara Fell and Ambrose George Fell.*)	1465	17th May 1867	William Robert Lake.
Machinery or apparatus for separating liquids or moisture from substances, and also for revivifying and cooling animal charcoal and other substances, and for treating sugar. (*desiccating painters' colours.*)	1605	30th May 1867	William Orr.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PAINTING, &c.—*continued.*			
Ornamenting surfaces of paper, woven fabric and other material, to render them suitable for book-binding and other similar uses.	1695	8th June 1867	Alexander Parkes.
Improvements in machinery or apparatus for separating liquids or moisture from substances, and also for revivifying and cooling animal charcoal and other substances, and for treating sugar. (*painters' colours.*)	1707	10th June 1867	William Orr.
Improvements in the manufacture and treatment of white lead, and in apparatus connected therewith. (*Communicated by Robert Griffith Hatfield.*)	1728	12th June 1867	Alexander Melville Clark.
Improvements in guns, projectiles and cartridges, and in the construction of the same. (*varnishing projectiles.*)	1757	15th June 1867	George Clark.
A new metallic zinc paint - - - - -	1845	25th June 1867	James Webster.
An improved reducing machine for grinding and pulverizing metallic ores and any other substances. (*or making paint.*)	1939	3rd July 1867	Thomas Borlase.
A new method of bronzing metallic and other surfaces - - - - - -	1979	2nd April 1867	Joseph Storey. William Edward Bickerdike. William Virgo Wilson.
Brushes - - - - - - - (*paint brushes.*) (*Communicated by Henry Rosenthall.*)	2090	16th July 1867	Henri Adrien Bonneville.
Manufacture of capsules - - - - - (*colouring.*) (*Communicated by Florentin Aubey.*)	2151	24th July 1867	William Betts.
Apparatus for feeding paints on the stone or stones on which they are ground - - - -	2464	29th Aug. 1867	John Paulin. Robert Davison Paulin.
Manufacture of varnishes - - - -	2522	5th Sept. 1867	Frederic Versmann.
Improvements in the treatment and application of the residuum which results from the clarification and purification of cotton seed oil and other vegetable drying oils, and of the residuum which results from the distillation or other analogous treatment of the said material, for the manufacture and preparation of isolating preservative and anti-corrosive compositions. (*forming varnishes.*)	2656	21st Sept. 1867	Giacomo Eduardo Marchisio.
An improved process and composition for the preservation from decay of stone, brick, plaster, metal and other substances, and for hardening or glazing their surfaces so as to prevent smoke or dirt from adhering to them.	2919	17th Oct. 1867	James Cubitt.
Method of tinting or colouring photographs, engravings, water colour and other drawings, or porcelain.	3057	30th Oct. 1867	Frederick Piercy.
Improvements in treating oils and spirits, and in apparatus to be used for this purpose. (*for painting and varnish making.*)	3191	11th Nov. 1867	Francis Louis de Gerbeth.
Improvements in coating metals and metallic articles for the purpose of protecting or preserving the same from oxidation and decay. (*imparting colour to glazes.*)	3288	20th Nov. 1867	Baroness Camille de Lavenant.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PAINTING, &c.—*continued.*			
Means of and apparatus for treating metals and minerals in order to produce their oxides or other chemical or mechanical combinations, and to separate metals from their ores or from their alloys. (*forming litharge.*) (*Communicated by Zabdiel Adams Willard and William Gardner Adams.*)	3360	27th Nov. 1867	Henry Francis Gardner.
Certain improvements in the manufacture of water-proof or liquid-proof paper or glazed paper or fabrics. (*a surface for painting upon.*)	3437	3rd Dec. 1867	John Thorpe.
Treatment of paper and certain woven fabrics for rendering them ornamental and durable as articles of dress, and for decorative and ornamental purposes. (*varnishing and decorating.*)	3535	12th Dec. 1867	Edward Reed Sintzenich.
Treatment of gutta-percha, indian-rubber, Honduras gum, and the other allied gums, for the production of a preparation or preparations applicable as a varnish, cement, paint, stain, water and air proof material, solid or elastic material and for other purposes. (*Communicated by Daniel Reed.*)	3542	13th Dec. 1867	Edward Reed Sintzenich.
PAPER, PASTEBOARD AND PAPIER-MÂCHÉ; PAPER-HANGINGS.			
I.—Making Paper, Papier-mâché, Preparing Pulp, &c.			
Paper-making machinery - - - -	30	4th Jan. 1867	Ebenezer Noah Gregory.
Improved apparatus for regulating, controlling and for varying the speed of shafts and machinery. (*paper making machines.*)	51	8th Jan. 1867	Robert Robinson.
Improvements in working electric telegraphs, and in the construction of the instruments and manufacture of the material employed therein. (*manufacture of tin paper.*) (*Communicated by Paul Antoine Marie Chauvassaignes and Jacques Paul Lambrigot.*)	181	24th Jan. 1867	Clinton Edgcumbe Brooman.
An improved writing paper - - - (*Communicated by Joseph Eves Hover.*)	254	30th Jan. 1867	Bristow Hunt.
Improved machinery for separating the fibres of woods into shreds suitable for converting into pulp for paper making, and also for stuffing and packing various useful articles.	287	1st Feb. 1867	Frederik Bauman.
Treating vegetable substances chiefly applicable to the manufacture of paper pulp and fibres. (*Communicated by Benjamin Chew Tilghman.*)	385	11th Feb. 1867	William Edward Newton.
Machinery or apparatus for disintegrating wood and other similar fibrous substances. (*for manufacture of paper.*)	477	21st Feb. 1867	William Riddell.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PAPER, &c.—*continued.*			
Rag engines - - - - -	482	22nd Feb. 1867	James Roger Crompton.
Treatment or preparation of straw and other fibrous materials for the manufacture of paper.	647	7th March 1867	Edward Lloyd.
Machines for "grinding" or tearing up rags and other fibrous substances.	714	12th March 1867	William Wood.
Disaggregation of China grass, hemp, flax, jute, phormium tenax and other vegetable fibres, for the production of threads, fabrics, and pulp for paper. (*Communicated by François Mathurin Caillard.*)	799	19th March 1867	William Clark.
Machinery for seeding, breaking, drying, washing, bleaching, softening, combing, brushing and hackling flax, hemp, jute, China grass, New Zealand flax, Esparto and other fibres, for spinning and paper stuff.	841	22nd March 1867	John Spencer.
Engines and machines for washing, beating, grinding or reducing rags and other fibrous substances into paper pulp, and into fibres for yarns or cloth.	914	28th March 1867	William Wood.
Certain new and useful improvements in paper machinery.	971	1st April 1867	Francis Curtis.
Manufacture of paper and of the chemical matters employed therein - - - - (*Partly communicated by Ernest Pinchon.*)	1171	22nd April 1867	Charles Townsend Hook. Eustace Hook.
Certain improvements in the method and apparatus for keeping warm glues, starches, gums and other liquids, which is also applicable for keeping other articles warm. (*in finishing paper.*)	1208	26th April 1867	Tempest Booth.
Machines for drying yarns, paper and fabrics -	1389	10th May 1867	James Johnson. Alfred Giles.
Manufacture of cards, tablets and other articles from which marks made with water colors, ink or pencil may be repeatedly erased by moisture, without injury to the surface. (*sheets of paper.*)	1402	11th May 1867	Thomas Nelson.
Bleaching textile materials or fibres, more especially wood pulp, for the manufacture of paper and pasteboard. (*Communicated by Jean Bernard Biron.*)	1403	11th May 1867	William Clark.
Improvements in the treatment and preparation of fibrous substances or vegetable matters as pulp for the manufacture of paper, and in apparatus for the same.	1455	17th May 1867	Julien Denis.
Preparation of pulp for the manufacture of paper - (*Communicated by Alexander Aussedot.*)	1752	15th June 1867	William Edward Newton.
A diary blotting pad - - - -	1832	24th June 1867	John Henry Kearns.
Machinery for making paper - - -	2085	16th July 1867	George Watkin Hayes.
Machinery for reducing wood to shreds to be used in the manufacture of paper pulp.	2261	5th Aug. 1867	Constantine de Negri.
Improvements in the method of and apparatus for treating certain vegetable substances in order to obtain fibrous materials and paper pulp therefrom. (*Communicated by Charles Gastaldetti and Joseph Vanzina.*)	2356	16th Aug. 1867	Michael Henry.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PAPER, &c.—*continued.*			
Treating products obtained when operating on wood and other vegetable substances to obtain fibre therefrom. (*see* "GAS.")	2370	17th Aug. 1867	Frederick Burnett Houghton.
An improved mode or improved means of coloring or ornamenting fabrics and other surfaces and of preparing printing surfaces. (*Communicated by Charles Depoully.*)	2378	19th Aug. 1867	Clinton Edgcumbe Brooman.
Apparatus for moderating or regulating the feeding of the pulp in paper machines. (*Communicated by Jean Baptiste de Mulder.*)	2487	3rd Sept. 1867	Charles Tessier.
A new or improved material to be used as a substitute for oiled silk, bladders, gut-skins, india-rubber, and other waterproof materials and leather. (*for tracing paper, cartridge paper, &c.*)	2604	14th Sept. 1867	John Jeyes.
Manufacture of paper and articles of paper - -	2690	24th Sept. 1867	John Harcourt Brown.
Preparation of paper which cannot be tampered with for the removal of writing thereon, without detection.	2715	26th Sept. 1867	John Jameson.
Improvements in preparing the surfaces of paper or other material for drawing purposes, and in the application of the same to lithographic and other kinds of printing.	2844	9th Oct. 1867	Thomas Nelson.
Manufacture of filtering paper - - -	3150	7th Nov. 1867	Ralph Robinson.
Improvements in evaporating apparatus and in utilizing the steam derivable from such apparatus. (*for paper making.*)	3277	19th Nov. 1867	William Anderson.
Machinery for the manufacture of paper - -	3347	26th Nov. 1867	James Hudson, junr.
Improved apparatus for preparing paper pulp - (*Communicated by John W. Dixon.*)	3351	26th Nov. 1867	Alfred Vincent Newton.
Improvements in machinery or apparatus for drying and stretching woven fabrics, paper or continuous lengths of other similar materials.	3401	30th Nov. 1867	Thomas Briggs, junior.
Certain improvements in the manufacture of waterproof or liquid-proof paper or glazed paper or fabrics.	3437	3rd Dec. 1867	John Thorpe.
An improved means to be employed for effecting the safe transmission of money or money orders, also improvements in the formation of documents that have to be separated.	3464	5th Dec. 1867	James Gibson Scott.
A new or improved material to be employed in the manufacture of cord, rope, lace, paper, cardboard, pasteboard and other articles.	3520	11th Dec. 1867	Faustino Vita.
Preparation of a substitute for emery paper - - (*see* "GRINDING.")	3615	19th Dec. 1867	Reginald Chauncy.
"Rag rolls" or "beaters" of "rag-engines," "beating-engines," or other similar machinery employed in the manufacture of paper.	3673	27th Dec. 1867	Jonathan Edge.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PAPER, &C.—*continued.*			
II.—Cutting, Folding and Ornamenting Paper and Papier-mâché; Applications of Paper.			
A new or improved compound material or substance to be used for binding books, for panelling, and for other purposes where strength and lightness are required. (*millboard veneered.*)	90	14th Jan. 1867	Frederick Brampton.
Improvements in and connected with the folding of newspapers and other periodical publications.	110	16th Jan. 1867	William Alexander Lyttle.
Ornamenting, printing, cutting, creasing, bending, embossing and manufacturing articles from wood and other materials. (*card paper.*)	155	22nd Jan. 1867	Edward Tomlinson.
Starching or stiffening yarns, threads, woven fabrics and tissues. (*Communicated by John Gaspard Meyer-Rauschenbach.*)	340	6th Feb. 1867	Frederik Rosenauer.
An improved mode of coating paper and other materials with fluid substances, solutions and compounds, for photographic and other purposes (*Communicated by John Cushing Crosman.*)	659	8th March 1867	William Robert Lake.
An improved mode of and means for producing pictures, designs, letters and other characters or figures upon glass, metal, wood and other materials. (*covering designs on paper with metallic leaf or powder.*)	732	13th March 1867	Edward Lee.
Collars, cuffs and similar articles composed of paper or of paper and tissue combined.	829	22nd March 1867	Charles Kaufmann.
Improved means of producing designs upon paper	947	30th March 1867	Walter Bentley Woodbury. Robert Howe Ashton.
Method of and apparatus for treating or pressing paper, pasteboard and similar materials, after printing on the same - - - -	1365	8th May 1867	Rowland Wood. Austin Wood.
Manufacture of small model or toy boats or ships from paper or cardboard.	1367	9th May 1867	Albert Fournier.
Axle-boxes and bearings - - - (*using pasteboard.*) (*Communicated by Patrick Sarsfield Devlan.*)	1429	14th May 1867	Alfred Vincent Newton.
Machinery for folding sheets of paper or other fabric or material.	1502	21st May 1867	Joseph Davies.
An improved fabric for the manufacture of machine belting and for other purposes. (*of paper pulp.*) (*Communicated by Zenas Marshall Crane and James Brewer Crane.*)	1524	22nd May 1867	Alexander Melville Clark.
Machinery for folding paper - - -	1536	23rd May 1867	Simon Atkinson. Thomas Atkinson.
Improvements in apparatus for applying adhesive agents to pieces of paper and other light materials, and for lifting the same, especially applicable to machinery for the manufacture of envelopes.	1623	31st May 1867	Phineas Lawrence.
Paper folding machines - - -	1662	6th June 1867	James Livesey.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PAPER, &c.—*continued.*			
Ornamenting surfaces of paper, woven fabric, and other material, to render them suitable for book-binding and other similar uses.	1695	8th June 1867	Alexander Parkes.
A new or improved machine for bronzing (*paper, &c.*)	1788	19th June 1867	Louis Simon.
Method of fastening and securing the overlapping parts of envelopes for enclosing letters and other matters.	1882	27th June 1867	William Davis.
Improvements in the manufacture of carriage bodies, and which said improvements are also applicable to the manufacture of pleasure and other boats, and other like purposes where great strength and lightness is of importance. (*from paper pulp.*)	1903	29th June 1867	Henry John Cox.
Presses for cutting paper	1920	2nd July 1867	James Robert Burn.
A process to prepare and preserve paper and tissues with a solution of perchloride of iron, intended for stopping the bleeding of wounds.	2006	9th July 1867	Gustave Gabillon.
Manufacture of corsets (*of paper pulp.*) (*Communicated by Joseph Beal, Granville Webster, Edward Sawyer and John Hunt.*)	2056	12th July 1867	George Tomlinson Bousfield.
Machinery for the manufacture of paper bags	2283	7th Aug. 1867	Joseph Pickles Binns.
Improved apparatus to be used in the manufacture of envelopes	2675	23rd Sept. 1867	John Griffin. Frank Green.
Certain improvements in mechanism or apparatus employed for cutting paper, pasteboard, textile fabrics and similar substances or materials.	2911	17th Oct. 1867	Robert Craib Ross.
An improved method for producing from one piece of writing paper a sheet of note or letter paper and an envelope to enclose the said sheet of paper, also for other improvements connected therewith.	2966	22nd Oct. 1867	Nicolas Alfred Thoumelet.
Apparatus for applying bronze and other powders on paper and other surfaces. (*Communicated by Jacques Laurent Poirier.*)	3229	14th Nov. 1867	Alexander Melville Clark.
Means or apparatus for accumulating and delivering sheets of paper or other fabric received from a printing press or other supply.	3330	25th Nov. 1867	Thomas Jefferson Mayall.
Envelopes	3342	26th Nov. 1867	Charles Elias Penny.
Apparatus for composing and distributing type (*use of perforated paper.*)	3366	28th Nov. 1867	Alexander Mackie.
Treatment of paper and certain woven fabrics for rendering them ornamental and durable as articles of dress, and for decorative and ornamental purposes.	3535	12th Dec. 1867	Edward Reed Sintzenich.
Certain improvements in the method of and means for retaining the outer ends of tapes, ribbons, and other similar narrow fabrics and paper.	3545	13th Dec. 1867	Gervase Marson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PAPER, &c.—*continued.*			
III.—Paper-hangings.			
Tinting or colouring the surface of paper or other materials or fabrics. (*for hangings.*) (*Communicated by George Streat.*)	121	17th Jan. 1867	William Edward Newton.
Coverings for internal walls and surfaces - - (*substitutes for paper-hangings.*)	983	2nd April 1867	Jost Mahler.
An improved machine for cutting scale-board, and for the manufacture of the scale-board or material cut by said machine into an improved fabric for structures generally. (*substitute for wall papers.*) (*Communicated by John Kinney Mayo.*)	1051	8th April 1867	William Clark.
Improvements in cylinder printing machines, more especially designed for producing coloured patterns upon textile fabrics and paper-hangings. (*Communicated by George Henry Babcock, Joseph Potter Manton and Jonathan Boyd.*)	3186	11th Nov. 1867	William Robert Lake.
An improved system or mode of ornamenting paper-hangings, and machinery and apparatus therefor. (*with leaf or bronze of gold, &c.*)	3259	16th Nov. 1867	William Bailey.
PAVING, ROAD-MAKING AND CLEANSING; PAVEMENTS, SCOURING STONE FLOORS.			
Improvements in making and repairing highways, roads or walks, which improvements are also applicable to bedding and adjusting railway sleepers and other similar purposes.	91	14th Jan. 1867	James Reilly.
A new or improved method of facilitating the removal of snow, hail or ice from streets or other places, by means of steam or hot air injected upon it in a close chamber.	92	14th Jan. 1867	Charles James Pownall.
Iron channels, tramways and pavements - -	205	26th Jan. 1867	Stephen Carey.
An improved steam roller, also applicable as a traction engine and portable engine.	347	7th Feb. 1867	William Thomas Carrington.
Street gutters and sinks - - - -	417	14th Feb. 1867	George William Wright.
Steam road rollers - - - -	796	19th March 1867	Thomas Aveling.
Improvements in the construction of sea-walls, quays, jetties, piers and roadways, in the reclamation of land, in the formation of docks, reservoirs, basins and coast-harbours.	1018	5th April 1867	Henry Buss.
An improved machine for cutting scale-board, and for the manufacture of the scale-board or material cut by said machine into an improved fabric for structures generally. (*for side walks.*) (*Communicated by John Kinney Mayo.*)	1051	8th April 1867	William Clark.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PAVING, &c.—*continued.*			
An improvement in the manufacture of bricks and other materials, without the aid of artificial heat, for hydraulic and other purposes. (*paving blocks.*)	1147	20th April 1867	William Kirrage.
Manufacture of artificial granite and other artificial bricks and blocks suitable for buildings, engineering structures, pavements and other similar purposes. (*Communicated by Pierre Rodolphe Pozzi.*)	1458	17th May 1867	Perceval Moses Parsons.
Improved paving for roads and ways - -	1476	18th May 1867	Bernardo Sheil.
Improvements in steam rollers for rolling roads, and in pitch chains for working the same and for other purposes.	1500	20th May 1867	David Thomson.
Means or apparatus for removing mud, drift or other rubbish from streets and other places.	2434	24th Aug. 1867	William Berry.
A liquid or composition (of a deodorizing nature) mixed with water, whereby roads, streets and other places are kept moist and free from dust, for several days after once watering - -	2482	2nd Sept. 1867	Henry Octavius William Cooper. Elizabeth Foster Cooper.
Improvements for speedily and effectually removing snow from roads and streets.	2499	4th Sept. 1867	George Crane.
An improved illuminating roof and roof pavement. (*Communicated by Thaddeus Hyatt.*)	2539	7th Sept. 1867	Benjamin Franklin Stevens.
Arrangement and construction of street sweeping and cleaning machines.	2845	9th Oct. 1867	William Warren.
Manufacture of artificial granite suitable for buildings, engineering structures, pavements and other similar purposes. (*Communicated by Pierre Rudolph Pozzi.*)	3234	15th Nov. 1867	Perceval Moses Parsons.
Paving - - - - (*Communicated by Louis Alexandre Auguste Le Poreq D'Herlon.*)	3294	21st Nov. 1867	George Frederick Redfern.
Arrangements or apparatus for watering and cleansing streets and roads, and for speedily removing snow.	3337	26th Nov. 1867	William Sim.
Means and apparatus to be applied for melting snow and ice in public thoroughfares or otherwise.	3456	4th Dec. 1867	John Farrand Clarke.
Construction of roads or streets - - -	3596	18th Dec. 1867	John Murray.
Construction of roads or carriage-ways and footpaths.	3705	30th Dec. 1867	Alfred Grainger.
Construction of paving - - - -	3713	31st Dec. 1867	Victor Leon Daguzan.
Road-sweeping machines - - - (*Communicated by Jean Tailfer and Charles Léon Blot.*)	3720	31st Dec. 1867	Alexander Melville Clark.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PEAT.			
Treatment of peat - - - -	512	25th Feb. 1867	Eugène Chapron.
Improvements in the manufacture of colours and the extraction of colouring and dyeing matters from coal oil, shale oil or coal tar combined with peat or turf, and for a combination of any of these substances, and also for the utilization of the residue for the purpose of what is known as moulders' blacking, after the colouring and dyeing matters have been extracted - -	1151	20th April 1867	Thomas Vincent Lee. Charles Edmund Lankester.
Improvements in the treatment of peat and in the manufacture of peat charcoal, and in the machinery or apparatus employed therein. (*Communicated by Augustus Figge.*)	1190	24th April 1867	John Henry Johnson.
Brick-making machinery - - - (*and moulding peat.*) (*Communicated by John Scott Meredith and John Hanson Mitchell.*)	1393	10th May 1867	William Clark.
Drying peat and other materials - - -	1595	29th May 1867	William Barry Ritchie. Jacob Geoghegan Willans.
Machinery and apparatus for preparing, shaping and drying peat and other vegetable and mineral substances.	2233	2nd Aug. 1867	Frederick Ludwig Hahn Danchell.
PENS, PENHOLDERS, PENCILS AND PENCIL-CASES.			
Improvements in penholders and in the means or apparatus for supplying ink to pens.	74	11th Jan. 1867	John Darling.
Ruling pens - - - -	201	25th Jan. 1867	William Hartin.
Improvements in reservoir penholders and in the means or apparatus for supplying ink thereto.	288	2nd Feb. 1867	John Darling.
Manufacture of envelope cases, blotting books and other articles, commonly called "writing" or library sets, and other similar articles. (*pen trays, pen wipers.*)	305	4th Feb. 1867	George William Betjemann.
Improvements in and additions to boxes for containing metallic pens and other small articles.	374	9th Feb. 1867	Friedrich Leonardt.
Apparatus for facilitating the means of learning how to write. (*Communicated by Léon Woog.*)	1276	2nd May 1867	Henri Adrien Bonneville.
Construction and application of certain mechanical arrangements to be adapted as a self-acting and ink-supplying writing apparatus or fountain pen.	1509	21st May 1867	Charles Henry Thurnham.
Racks or holders for whips, canes and other like articles. (*for pens or pencils.*) (*Communicated by Edward Richmond.*)	1647	4th June 1867	John Henry Johnson.
Metallic pens and penholders conjointly - -	1759	17th June 1867	Richard William Barnes.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PENS, &c.—*continued.*			
A finger stall intended for writing with a single finger. (*substitute for penholder.*)	1969	5th July 1867	Pierre Louis François Eustache Roussel.
Penholders - - - - -	2309	12th Aug. 1867	Etienne Mounier.
Manufacture of metallic pens - - -	2669	21st Sept. 1867	Jacques Rives.
Improvements in holders for lead and other marking materials, part of which improvements is also applicable as holders for other articles.	3015	26th Oct. 1867	William Edward Wiley.
Racks or holders for whips, canes and other like articles. (*pen and pencil rack.*) (*Communicated by Edward Richmond.*)	3058	30th Oct. 1867	John Henry Johnson.
Machinery for ruling ornamental patterns or devices - - - - - (*constructing the pens.*)	3322	23rd Nov. 1867	Samuel Amphlet. Joseph Beverley Fenby.
PETTICOATS, SKIRTS, STAYS, CRINOLINES, DRESS SUSPENDERS, COLLARS, SHAWLS, MUFFS, LADIES' FANS.			
Construction of fire screens, fans, parasols, sun shades and such like articles - - -	104	15th Jan. 1867	Edward Brown Taylor. Frederick Winter.
Crinoline skirts - - - - -	168	23rd Jan. 1867	Coleman Coleman.
An improved machine for manufacturing eyelets - (*for stays and skirts.*)	260	30th Jan. 1867	William Rodolphus Landfear.
An improved fabric in imitation of the skins of animals, suitable for the manufacture of ladies' mantles, carriage rugs and other articles.	356	8th Feb. 1867	Edwin Firth.
Manufacture of stays, corsets and riding belts, and other similar articles.	408	13th Feb. 1867	Samuel Osborne.
Corsets - - - - - (*Communicated by Mademoiselle Marie Louise Changeur.*)	443	18th Feb. 1867	William Edward Newton.
Springs for crinolines for ladies' petticoats and other garments - - - - (*Communicated by Victor Alfred Krafft.*)	545	27th Feb. 1867	Louis Henry Philbois. Augustin Marchal.
A new and useful fabric for elastic stockings, stays or corsets, bandages and other similar and analogous articles.	592	2nd March 1867	Anne Catherine Laurys.
Fastening and unfastening ladies' stay's busks -	701	12th March 1867	Louis Charles Sodeman.
Ironing, pressing, finishing and damping machinery. (*for stay makers.*)	793	19th March 1867	James Moore Clements.
Collars, cuffs and similar articles composed of paper, or of paper and tissue combined.	829	22nd March 1867	Charles Kaufmann.
Stays or artificial support for the human body -	857	25th March 1867	Thomas Pebardy.
An improved spring petticoat - - -	1459	17th May 1867	Augustine Angot.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PETTICOATS, &c.—*continued.*			
Crinoline skirts	1656	5th June 1867	Léonce Bernard Schmolle.
An improved regulating "jupon" (*Communicated by Paul de Plument de Bailhac.*)	1874	27th June 1867	Clinton Edgcumbe Brooman.
Construction of ladies' skirts (*Communicated by Thomson, frères.*)	1893	28th June 1867	Henry Alexander Lyman.
Manufacture of corsets (*Communicated by Joseph Beal, Granville Webster, Edward Sawyer and John Hunt.*)	2056	12th July 1867	George Tomlinson Bousfield.
A new manufacture of woven fabrics imitating fabrics woven with horse hair	2349	15th Aug. 1867	Robert Cleland. Robert Cunningham.
Stays or corsets	2358	16th Aug. 1867	Rebecca Joseph.
Manufacture of garments for male and female attire. (*skirts, mantles or cloaks.*) (*Communicated by Leander Wolcott Boynton.*)	2529	6th Sept. 1867	John Garrett Tongue.
Stays, bodices or corsets	2576	11th Sept. 1867	Laura Mary Prewitt.
An improved petticoat	2649	20th Sept. 1867	René Raffault.
An improved fastener for neck-ties or other similar articles for ladies' or gentlemen's use	2723	26th Sept. 1867	Thomas Vaughton. Oliver Vaughton.
An improved fan	2737	28th Sept. 1867	Louis Laine.
A new or improved mode of securing or uniting stay, corset or legging busks	2827	8th Oct. 1867	John Reading. Samuel Alfred Reading. George Edward Reading. Frederick Francis Reading.
Improvements in the manufacture of corsets and in apparatus for taking measurements for the same. (*Communicated by François Henri Mariotte and Edouard Turpin.*)	2858	11th Oct. 1867	George Davies.
Improvements in articles consisting of muffs combined with bags or similar receptacles, and in the frames of such receptacles	2892	15th Oct. 1867	Moritz Vogl. Heiman Van Dyk.
Corsets	3088	2nd Nov. 1867	Richard Parry.
Stays, corsets, bodices and riding belts	3118	5th Nov. 1867	Edward Charles Vine.
Various portions of ladies' and gentleman's wearing-apparel.	3471	6th Dec. 1867	Sigmund Goldstein.
Improvements in collars, cuffs, anklets, belts and other like articles of wearing-apparel	3486	7th Dec. 1867	John Blakey. Howard Busby Fox.
Manufacture of fabrics to be made into skirts	3618	19th Dec. 1867	William Black Pullar.
Joining horn and whalebone (*for dress-making.*)	3619	19th Dec. 1867	Charles Beck.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PHOTOGRAPHY AND PHOTOGRAPHIC APPARATUS.			
An improved system of and apparatus for manufacturing photographic pictures.	20	3rd Jan. 1867	William George Helsby.
Production of printing and embossing surfaces from photographs.	45	7th Jan. 1867	Robert Howe Ashton.
Certain improvements in the art of making photographic transfers, adapted to the purpose of engraving or lithography, or of making plates or blocks from which to print the design or other matter transferred.	71	11th Jan. 1867	Arthur Guy Morvan.
Tinting or colouring the surface of paper or other materials or fabrics. (*paper for photographs.*) (*Communicated by George Streat.*)	121	17th Jan. 1867	William Edward Newton.
Cases or receptacles for needles, pins, cards, stamps, photographs, cigars and other similar articles.	122	17th Jan. 1867	Richard Newhall.
Manufacture of lenses for photographic cameras and various optical instruments.	174	23rd Jan. 1867	Thomas Ross.
An improved mode of and apparatus for taking photographic portraits, pictures or representations. (*Communicated by Adolphe Guillaume Larauza.*)	407	13th Feb. 1867	William Edward Newton.
An improved mode of coating paper and other materials with fluid substances, solutions and compounds, for photographic and other purposes. (*Communicated by John Cushing Crosman.*)	659	8th March 1867	William Robert Lake.
An improved mode of and means for producing pictures, designs, letters and other characters or figures upon glass, metal, wood and other materials. (*transferring photographs.*)	732	13th March 1867	Edward Lee.
Ironing, pressing, finishing and damping machinery. (*for photographers.*)	793	19th March 1867	James Moore Clements.
Process for producing indestructible photographic pictures.	825	21st March 1867	Herbert William Hart.
Improvements in photographic pictures and in apparatus for producing them.	849	23rd March 1867	Ernest Edwards.
Improved means of producing designs upon paper -	947	30th March 1867	Walter Bentley Woodbury. Robert Howe Ashton.
Producing opalline pictures into china, glass, porcelain or any other enamelled surface.	955	30th March 1867	George Higginson.
Improved means of producing surfaces in relief or in intaglio for printing and other purposes - (*Communicated by Andrè Adolphe Disderi.*)	963	1st April 1867	Clinton Edgcumbe Brooman.
Cases and boxes for holding needles, pins and other articles. (*photographs.*)	1260	1st May 1867	Reuben Young.
Portable photographic apparatus - - - (*Communicated by Henry Cook.*)	1526	22nd May 1867	William Edward Newton.
A new and improved arrangement of apparatus to be employed in producing photographic pictures.	1553	24th May 1867	James Simpson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PHOTOGRAPHY, &c.—*continued.*			
An improved means or method of illuminating the shadows and harmonising the lights and shades in photographic impressions.	1593	29th May 1867	Franklin Benjamin Gage.
Photographic albums and other like articles - (*Communicated by Frederic Wilhelm Marx.*)	1603	30th May 1867	Clinton Edgcumbe Brooman.
An improved camera obscura - - -	1676	7th June 1867	Jean Petrzywalski.
Preparation of canvas and other similar materials for enlarging, printing and developing objects from negatives or positives obtained by means of photography.	1994	8th July 1867	Julius Maria Loewe.
Photographic apparatus - - - -	2170	26th July 1867	Camille Silvy.
A portable laboratory specially intended for photographic excursions. (*Communicated by Hippolyte Rohat.*)	2784	3rd Oct. 1867	William Edward Gedge.
Chairs for the use of dentists, barbers, photographers or other persons, such invention also being applicable to other useful purposes.	2915	17th Oct. 1867	Otis Converse White.
Method of tinting or colouring photographs, engravings, water colour and other drawings, or porcelain.	3057	30th Oct. 1867	Frederick Piercy.
Treatment of gutta-percha, indian-rubber, Honduras gum, and the other allied gums, for the production of a preparation or preparations applicable as a varnish, cement, paint, stain, water and air proof material, solid or elastic material and for other purposes. (*for photographic printing.*) (*Communicated by Daniel Reed.*)	3542	13th Dec. 1867	Edward Reed Sintzenich.
PICTURES, PORTRAITS AND MINIATURES; PICTURE-FRAMES.			
An improved system of and apparatus for manufacturing photographic pictures.	20	3rd Jan. 1867	William George Helsby.
Tinting or colouring the surface of paper or other materials or fabrics. (*paper for pictures.*) (*Communicated by George Streat.*)	121	17th Jan. 1867	William Edward Newton.
An improved mode of and apparatus for exhibiting moving and other pictures.	380	9th Feb. 1867	Alonzo Galord Grant.
An improved mode of and apparatus for taking photographic portraits, pictures or representations. (*Communicated by Adolphe Guillaume Larauza.*)	407	13th Feb. 1867	William Edward Newton.
Producing transparent pictures for exhibition in magic lanterns, by a cheaper and easier method than heretofore.	705	12th March 1867	Thomas Hatton.
Process for producing indestructible photographic pictures.	825	21st March 1867	Herbert William Hart.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PICTURES, &c.—*continued.*			
Improvements in photographic pictures and in apparatus for producing them.	849	23rd March 1867	Ernest Edwards.
Improved means of producing designs upon paper (*as pictures.*)	947	30th March 1867	Walter Bentley Woodbury. Robert Howe Ashton.
Producing opalline pictures into china, glass, porcelain or any other enamelled surface.	955	30th March 1867	George Higginson.
A new or improved painters' easel - -	1073	11th April 1867	Robert Day.
An improved apparatus for preventing the access of insects to the interior of dwellings and to pictures, mirrors and articles of furniture. (*net cover.*) (*Communicated by John George De Coursey.*)	1238	29th April 1867	John Henry Johnson.
A new and improved arrangement of apparatus to be employed in producing photographic pictures.	1553	25th May 1867	James Simpson.
Making frames for looking-glasses, pictures and mouldings.	1789	19th June 1867	Morris Lyons.
Apparatus for suspending pictures and other articles	2129	20th July 1867	William Potts.
Improvements in watch cases, which improvements are also applicable to locket and miniature cases. (*Communicated by William Henry Halsey.*)	2252	3rd Aug. 1867	James Thomas Hatfield.
Mounts or holders for maps, tablets, prints, blinds and similar articles.	2615	17th Sept. 1867	Thomas Turner.
An improved map, blind, scene and picture roller -	2631	19th Sept. 1867	Philip Porter.
Method of tinting or colouring photographs, engravings, water colour and other drawings, or porcelain.	3057	30th Oct. 1867	Frederick Piercy.
PIGEON-SHOOTING.			
Improvements applicable to traps for pigeon and other shooting.	3660	24th Dec. 1867	Frederick Render.
PILE-DRIVING AND DRAWING.			
Breaks and apparatus for giving motion to machinery. (*screwing down piles.*)	299	2nd Feb. 1867	Robert David Napier.
Iron piles and columns - - - -	401	13th Feb. 1867	Joseph Westwood. Robert Baillie.
A compound safety disengaging hook - - (*for pile driving.*)	573	1st March 1867	Jubal Charlton Broadbent.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PILE-DRIVING, &c.—*continued.*			
An improved machine for cutting scale-board, and for the manufacture of the scale-board or material cut by said machine into an improved fabric for structures generally. (*for covering of piles.*) (*Communicated by John Kinney Mayo.*)	1051	8th April 1867	William Clark.
An improved shoe for piles - - - -	1460	17th May 1867	Henry Hollingsworth.
Improvements in sinking or forming wells, and in apparatus to be used for this and similar purposes. (*springs for pile driving.*) (*Partly communicated by Stephen Brewer.*)	2981	23rd Oct. 1867	James Lee Norton.
PILLARS, COLUMNS, POSTS, SLABS, VASES; STATUARY.			
Letter boxes, letter pillars and such like depositories.	169	23rd Jan. 1867	William Dennis.
Iron piles and columns - - - - -	401	13th Feb. 1867	Joseph Westwood. Robert Baillie.
Improvements in tent poles for regulating the tension from the interior of the tent or marquee.	600	4th March 1867	Edward Deane.
Certain improvements in the manufacture of metallic bedsteads, part of which said improvements are applicable to cornice poles, gas fittings, balustrades and other like articles -	639	7th March 1867	Robert Luke. William Parkes.
Construction of posts, poles and similar supports for telegraphic, agricultural or other purposes. (*Communicated by Guillaume Lichtenfelder.*)	887	26th March 1867	Charles Emile Sohn.
Improvements in posts or supports, particularly applicable to posts or supports for telegraph wires.	1048	8th April 1867	William Thomas Henley.
An improvement in the manufacture of bricks and other materials, without the aid of artificial heat, for hydraulic and other purposes. (*columns.*)	1147	20th April 1867	William Kerrage.
Improvements in telegraph posts, also applicable to ships' masts and posts or supports for other purposes - - - - - -	1319	6th May 1867	Paul Haenlein. Joseph Fisher. Rowland George Fisher.
Improvements in rolling and shaping metals, and in the machinery or apparatus employed therein. (*forming pillars.*) (*Communicated by Hippolyte Ulysse Petin and Jean Marie Gaudet.*)	1714	11th June 1867	John Henry Johnson.
Improvements in the construction and manufacture of iron or metal rail rods or bars for balconies, gates, railings, pillars, standards or columns and other useful purposes, and also in the machinery employed therein.	1739	14th June 1867	Stephen Tuddenham.
An improved method of treating glass in order to produce tablets and other articles.	1914	29th June 1867	George Rees.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PILLARS, &c.—*continued.*			
Letter boxes, letter pillars and such like depositories.	2141	23rd July 1867	William Dennis.
Apparatus for preparing moulds for the casting of pipes, cylinders, pillars, rollers and other forms -	2286	8th Aug. 1867	Charles Benson. Joseph Barker.
Machinery for polishing, grinding and edging slabs of marble, slate and other minerals. (*Communicated by Stinson Hagaman.*)	2572	11th Sept. 1867	Alexander Melville Clark.
Manufacture of lamp posts - - -	2847	10th Oct. 1867	Richard Brotherton. Joseph Waldron.
Construction of letter boxes, pillar letter boxes, and money and other such like boxes.	2948	19th Oct. 1867	Maurice William Shove.
A telescopic apparatus applicable as a temporary or stationary observatory for temporary bridges, building and other purposes. (*column or scaffold.*)	2969	22nd Oct. 1867	William Beale.
Manufacture of grindstones and other blocks or forms of artificial stone - - - (*columns and slabs.*)	3193	11th Nov. 1867	Frederick Ransome. Henry Bessemer. Ernest Leslie Ransome.
Improvements in telegraph posts and in apparatus for fixing the same.	3286	20th Nov. 1867	Joseph Oppenheimer.
Posts or uprights for electric telegraphs - -	3406	30th Nov. 1867	Samuel Sharrock.
Construction of metallic and other buildings - (*pilasters or standards.*)	3428	2nd Dec. 1867	Robert Porter.
Improvements in the manufacture of fire-bricks, tiles, and solid or hollow fire-lumps, and in the manufacture of retorts, pipes, crucibles or other hollow vessels, or moulds required to resist a high degree of heat, and also in the manufacture of ornamental bricks, tiles, quarries, trusses, bosses, vases, busts, figures, columns, capitals, bases, cornices, copings, tablets, finials, and other articles of an ornamental character employed in building and in architectural decorations.	3501	9th Dec. 1867	Henry Bessemer.
Improvements in apparatus for training or growing hops and other plants, which improvements may also be applied to line-posts and other posts or supports for various purposes - -	3509	10th Dec. 1867	John Grout. Edwin Matthews.
Metallic bedsteads, cots and couches - - (*making the pillars.*)	3610	19th Dec. 1867	James Atkins.
PINS AND NEEDLES.			
Cases or receptacles for needles, pins, cards, stamps, photographs, cigars and other similar articles.	122	17th Jan. 1867	Richard Newhall.
Machines for making machine knitting needles and other needles.	302	2nd Feb. 1867	Charles Pinckney Sumner Wardwell.
Needle cases - - - - -	603	4th March 1867	James William Lewis. George Archbold.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PINS, &c.—*continued.*			
Manufacture of needle-cases - - - (*Communicated by Jules Doderet.*)	669	8th March 1867	Jules Eugène Asselin.
Needles and other similar articles - - -	999	3rd April 1867	John William Scott.
Cases and boxes for holding needles, pins and other articles.	1260	1st May 1867	Reuben Young.
An improvement or improvements in papering needles or making up needles for sale.	1318	6th May 1867	Bryan Hinton Smith.
Improvements in reels or receivers upon which threads, silks or other fibrous material, in connection with needles (threaded or otherwise) are arranged, as also in the arrangement of needles threaded with any fibrous material, for the purpose of facilitating the use or uses of the same for all purposes of needle-work.	1633	3rd June 1867	William Pidding.
Boxes or cases for holding packets of needles and for other like uses.	2007	9th July 1867	William Avery.
Needle cases and wrappers - - - -	2206	30th July 1867	Arthur James.
Manufacture of cases, envelopes or wrappers for needles and pins.	2225	1st Aug. 1867	Richard Newhall.
Circular knitting frames - - - -	2628	18th Sept. 1867	Henry Moses Mellor.
An improvement or improvements in the manufacture of machine needles.	2787	3rd Oct. 1867	George Townsend.
Apparatus for threading needles - - - (*Communicated by Giovanni Valania.*)	2891	15th Oct. 1867	Henri Adrien Bonneville.
Knitting machines - - - - (*constructing the needles.*) (*Communicated by Samuel Larkin.*)	3265	18th Nov. 1867	Edward Thomas Hughes.
Improvements in placing, arranging or fixing needles and threads and other like fibrous materials on to reels or receivers, so as to render them more convenient for use, also in the manufacture and forms of such reels or receivers, and in the materials thereof.	3436	3rd Dec. 1867	William Pidding.
Papering needles or making up packets of needles for sale.	3584	17th Dec. 1867	Alfred Shrimpton.
Wrappers or envelopes for needles - -	3680	27th Dec. 1867	John Clarke.
PIPES, TUBES AND SYPHONS; TOBACCO-PIPES; JOINING PIPES.			
Tubular steam-boilers - - - - (*joints for transverse tubes.*)	76	11th Jan. 1867	James Howard. Edward Tenney Bousfield.
Improvements in pipe moulding and casting apparatus, and in black washing the moulds. (*Communicated by George Ross.*)	99	14th Jan. 1867	William Clark.
Improvements in apparatus used for boring and tapping gas and water mains, and in fitting service pipes or cocks thereto.	145	19th Jan. 1867	Alfred Upward.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PIPES, &c.—*continued.*			
Spinning and twisting machinery - - (*tube carrying bobbin spindle, &c.*) (*Communicated by George Chatterton.*)	199	25th Jan. 1867	George Haseltine.
Improvements in the manufacture of cores for the sockets of metal pipes, and in apparatus employed therein - - - - -	209	26th Jan. 1867	Matthew Hodgson Lishman. Edward Chambers.
An improvement or improvements in pipes for smoking.	263	31st Jan. 1867	Edward John Padbury.
Construction and arrangement of kilns and ovens (*for pipes and sewer tubes.*)	290	2nd Feb. 1867	John Gilbert Robinson.
New or improved means or apparatus for opening and closing the passage through cylinders, applicable to fire-arms of every description. (*Communicated by François Felix Challeton de Breughat.*)	326	6th Feb. 1867	John Box.
Machinery for manufacturing the junctions of gas, water, steam and other pipes.	365	8th Feb. 1867	William Jones.
Apparatus for regulating the supply of water to cisterns, and for preventing the bursting of water-pipes.	383	11th Feb. 1867	George Hugh Kidd.
An improved apparatus for drawing liquids from casks and other vessels - - - -	409	13th Feb. 1867	Henry Albert Davis. Samuel John Salkeld.
An improved apparatus for drawing off liquids and supplying them to bottles and other receptacles.	424	15th Feb. 1867	Pierre Duchamp.
Uniting iron and steel in sheets, plates, rails, bars, rods, links, bands, hoops, tubes or other forms, applicable to navigable vessels, forts, bridges, roofs, floors, tanks or chests.	469	21st Feb. 1867	William Bridges Adams.
Certain improvements in boilers or steam generators	609	5th March 1867	Thomas Beeley.
An improved feed-water regulator for steam-boilers (*Communicated by John Wesley Doughty and Benjamin Franklin Olmsted.*)	614	5th March 1867	George Haseltine.
Connecting the ends of pipes and tubes - -	753	15th March 1867	Nathan Thompson.
Core bars and studs to be used for casting iron pipes and similar articles.	813	21st March 1867	David Yoolow Stewart.
Coating metal tubes and rods, to render them suitable for use for many ornamental purposes.	865	25th March 1867	Alexander Parkes.
Improvements in the smelting and treatment of iron and other ores, in the fuel and other materials made use of in such treatment, and in apparatus for supplying the same to blast, puddling, and any other furnaces and fires in or by which great heat is required to be generated, parts of which improvements are applicable also to other purposes - - - - - -	922	29th March 1867	Enoch Harrison Aydon. Edward Field.
Improvements in bending and circling metallic plates, and in machinery or apparatus employed therefor. (*forming tubes.*)	949	30th March 1867	John Fleming.
Apparatus for the manufacture of bricks, tiles and other articles of plastic material. (*drain pipes.*) (*Communicated by Frederick Hertel.*)	954	30th March 1867	William Clark.
Apparatus employed for heating the feed water of steam-boilers - - - - -	1003	3rd April 1867	William Stafford. William Porter M^{c}Callum.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PIPES, &c.—*continued.*			
An improved machine for cutting scale-board, and for the manufacture of the scale-board or material cut by said machine into an improved fabric for structures generally. (*water pipes, flumes, &c.*) (*Communicated by John Kinney Mayo.*)	1051	8th April 1867	William Clark.
Means of coloring tobacco pipes and other articles of meerschaum and massa.	1132	17th April 1867	James Smith Brooks.
Pipes for smoking - - - - -	1141	18th April 1867	Eduard Wolf.
Brewers' mash tuns - - - - (*Communicated by James Walker.*)	1150	20th April 1867	John Millward.
Improvements in the manufacture of gun barrels and ordnance, which improvements are also applicable to the manufacture of iron and steel tubes for various purposes.	1253	30th April 1867	John Marshall.
Improvements in beer engines, which improvements are also applicable to pumps for various purposes. (*double branch pipe.*)	1297	3rd May 1867	John Holmes.
Improvements in waterclosets and sinks, and in apparatus for supplying water thereto and conducting it therefrom, parts of which apparatus are applicable to other purposes.	1426	14th May 1867	Josiah George Jennings.
Tobacco pipes - - - - -	1456	17th May 1867	Frederic Pelham Warren.
Apparatus for coupling pipes - - - (*Communicated by John Baptist Mette, junior, and Julius Bigot-Renaux.*)	1560	27th May 1867	Henri Bernoulli Barlow.
Seal or dip pipes in connection with gas and other retorts - - - - - -	1578	28th May 1867	Henry Cockey. Francis Christopher Cockey.
Construction of tobacco pipes - - -	1686	8th June 1867	Henry Parker.
Improvements in unions or apparatus for connecting together pipes or tubes, and for stopping the ends thereof.	1694	8th June 1867	Nathan Thompson.
Apparatus for elevating or moving grain, and for weighing and moving grain. (*conveying pipe or passage.*)	1717	11th June 1867	Stephen Wells Wood.
An improved apparatus to be employed in moving from place to place, laying down and jointing metal pipes - - - - -	1834	24th June 1867	Thomas Rafferty. John Henry Storey.
Improvements in the manufacture of welded tubes and in apparatus employed for that purpose, which latter are partly applicable to other purposes - - - - -	1937	3rd July 1867	William Galloway. George Plant.
Mouthpieces for cigars and pipes - - -	1945	3rd July 1867	William Thompson.
An improved tobacco pipe - - -	1977	6th July 1867	Robert Tiernan.
Machinery for manufacturing metal tubes - - (*Communicated by Charles Granville Smith.*)	1973	5th July 1867	William Robert Lake.
Unions or apparatus for connecting together pipes or tubes, and for stopping the ends thereof.	1987	6th July 1867	Nathan Thompson.
Scrapers for cleaning boiler tubes - - -	2086	16th July 1867	James Mannock.
An improved method of loading any number, description or size of cartridges used in breech-loading guns, with safety, rapidity and precision, and with any charge variable at pleasure. (*formation of diminishing tubes.*)	2091	17th July 1867	Thomas Wyllie Riddell-Webster.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PIPES, &c.—*continued.*			
Joints of pipes or tubes - - - - (*Communicated by Bernhard August Schäffer and Christian Friedrich Budenberg.*)	2124	20th July 1867	Arnold Budenberg.
Pipes for ventilating, heating and vaporizing hot-houses, malthouses and other buildings and residences.	2125	20th July 1867	William Taylor.
An improved apparatus for cleaning boiler and other tubes. (*Communicated by Jean Baptiste Christoffel, Samuel Booth and Samuel Booth, junior.*)	2134	22nd July 1867	William Robert Lake.
Construction of moveable joints for connecting metallic pipes and tubes.	2159	25th July 1867	Celi Timoleon Moulan.
Improvements in the preparation of hose for conveying water, which improvements are also applicable for the preparation of woven fabrics for cart covers and other similar purposes.	2224	1st Aug. 1867	James Quin.
Apparatus for preparing moulds for the casting of pipes, cylinders, pillars, rollers and other forms	2286	8th Aug. 1867	Charles Benson. Joseph Barker.
Uniting and treating iron, steel and other metals in sheets, plates, rails, bars, rods, links, bands, hoops, tubes or other formes, applicable to navigable vessels, forts, guns, bridges, roofs, floors, boilers, heaters, tanks, chests or like structures.	2376	19th Aug. 1867	William Bridges Adams.
Manufacture of waterproof tubes - - -	2394	21st Aug. 1867	Gustave Luyckx.
Mode of removing and cutting the hides of animals for the manufacture of driving bands or tubes of leather. (*Communicated by Alois Eschenlohr.*)	2471	30th Aug. 1867	Alexander Melville Clark.
Improvements applicable to cigars, cheroots, cigarettes, pipes and other smoking tubes. (*Communicated by Moritz Star.*)	2474	30th Aug. 1867	Morris Hammerstein.
Tobacco pipes - - - - -	2585	12th Sept. 1867	John William Halfpenny.
Construction of cores used in casting metallic pipes or tubes of a curved or cyphon form -	2601	14th Sept. 1867	Joshua Antill. George Grimes. Henry Charles Tunks.
Pipes for smoking - - - -	2673	23rd Sept. 1867	George Walter MacGeorge.
Improved apparatus applicable to turning and screw cutting. (*screw threads on pipes.*) (*Communicated by William Thomas Cole.*)	2720	26th Sept. 1867	Alfred Vincent Newton.
Machinery or apparatus for manufacturing india-rubber tubing.	2744	28th Sept. 1867	Milton Hamer.
An improvement or improvements in the manufacture of ornamental metallic tubes.	2749	30th Sept. 1867	Thomas Weston.
Manufacture of strip or sheet iron for certain purposes. (*for making tubes for boilers.*)	2768	2nd Oct. 1867	Richard Hobbs Taunton.
Improved methods of constructing steam generators for engines, new furnaces connected therewith, and the mode of working them, with machinery in combination with the uses to which they are applicable. (*stand pipes, main and service pipes.*)	2792	4th Oct. 1867	Henry Pinkus.
Pipes and cigar tubes - - - -	2817	7th Oct. 1867	Raoul Paul Faucheux.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PIPES, &c.—*continued.*			
Means and apparatus or implements employed for distributing sewage over land. (*constructing closed pipes.*)	2898	16th Oct. 1867	Baldwin Latham.
An improved mode of and means for preventing the bursting of the tubes in steam and water pressure gauges, and other tubes or pipes, from the effects of cold. (*Communicated by Ernest Dubois.*)	2925	18th Oct. 1867	Edward Casper.
Tobacco pipes - - - - -	2963	22nd Oct. 1867	Charles Ritchie.
Kilns for burning pipes, tiles, bricks, pots and earthenware.	2991	24th Oct. 1867	Henry Adcock.
An improved mode of and apparatus for cleaning boiler tubes.	3059	30th Oct. 1867	The Right Honourable James Earl of Caithness.
An improved artificial compound chiefly designed for use as a substitute for india-rubber or caoutchouc. (*for gas and water tubing.*) (*Communicated by Austin Goodyear Day.*)	3108	4th Nov. 1867	William Robert Lake.
Manufacture of grindstones and other blocks or forms of artificial stone - - - (*pipes.*)	3193	11th Nov. 1867	Frederick Ransome. Henry Bessemer. Ernest Leslie Ransome.
An improved tobacco pipe - - - -	3240	15th Nov. 1867	Leopold Beral Bertram.
Machinery for producing seamless tubes - - (*Communicated by William Forman Brooks.*)	3333	25th Nov. 1867	Thomas Chalmers.
An improved material or composition to be employed for covering or coating the interior surfaces of moulds, crucibles or ducts, previous to their receiving the molten metal in the process of casting and for other purposes.	3473	6th Dec. 1867	James Durrans.
Machinery for the manufacture of brass and copper tubes.	3480	6th Dec. 1867	Robert Webber Lindsay.
Socket and flange spigot pipes - - -	3491	7th Dec. 1867	Charles Mathew Barker.
Improvements in the manufacture of fire-bricks, tiles and solid or hollow fire-lumps, and in the manufacture of retorts, pipes, crucibles or other hollow vessels, or moulds required to resist a high degree of heat, and also in the manufacture of ornamental bricks, tiles, quarries, trusses, bosses, vases, busts, figures, columns, capitals, bases, cornices, copings, tablets, finials, and other articles of an ornamental character employed in building and in architectural decorations.	3501	9th Dec. 1867	Henry Bessemer.
An improved process for the reduction of tin so as to render it applicable for coating metals and for other purposes. (*for lining pipes.*) (*Communicated by Jules Fenquiéres.*)	3517	11th Dec. 1867	Alexander Melville Clark.
An improved method of and apparatus for the manufacture of tinned leaden pipes. (*Communicated by Augustin Henry Hamon.*)	3591	17th Dec. 1867	William Edward Newtor.
Tobacco pipes - - - - -	3646	23rd Dec. 1867	Henry Frederick Bengough.

For Cop Tubes, *see* "BOBBINS."

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PISTONS AND PISTON PACKINGS.			
Steam-engines - - - - -	61	9th Jan. 1867	James Petrie.
An improved packing for piston rods, pump rods and valve spindles - - - -	543	27th Feb. 1867	John McLintock.
Steam and gas engines - - - - (*Communicated by Charles E. Emery.*)	571	28th Feb. 1867	Alfred Vincent Newton.
Buffing springs and parts connected therewith -	704	12th March 1867	Henry Lee Corlett.
Rotary engines and pumps - - - (*Communicated by Dexter Davis Hardy.*)	755	15th March 1867	William Robert Lake.
Process of and apparatus for cleaning waste and other substances, and preventing the adhesion of sediment in steam-boilers and pipes. (*lubricating pistons.*)	774	18th March 1867	John Smith.
Construction of buckets for air and other pumps -	1235	29th April 1867	Jacob Bird.
Improvements in beer engines, which improvements are also applicable to pumps for various purposes. (*constructing the pistons.*)	1297	3rd May 1867	John Holmes.
Treating iron to obtain metallic compounds for various uses. (*for pistons.*)	1461	17th May 1867	Andrew Linmere Dowie.
Mining, tunnelling and stone-dressing machines, and valve motion therefor. (*Communicated by Richard Channing More Lovell.*)	1566	27th May 1867	William Snell.
Improvements in the production of motive-power and in the apparatus connected therewith. (*lubricating the piston.*) (*Communicated by Jacques Belou.*)	1575	28th May 1867	Henri Adrien Bonneville.
Marine and other steam-engines on the high and low pressure compound principle.	1596	29th May 1867	Henry Turner.
Improvements in buckets for pumps, especially suitable for pumps for mines, and in pistons for steam and other engines.	1821	21st June 1867	Francis Reddicliffe.
Construction of motive-power engines and pumps -	1822	21st June 1867	Emory M^{c}Clintock.
Improvements in or applicable to steam and other motive engines.	1974	6th July 1867	Walter Charles Church.
Improvements in the lateral action or induction of fluids, and in the apparatus or mechanism employed therefor.	2106	18th July 1867	Alexander Morton.
Combined gas and air engines - - - (*Communicated by Eugen Langen and Auguste Nicol Otto.*)	2245	3rd Aug. 1867	Charles Denton Abel.
Improvements in utilizing certain waste materials and in manufacturing packing therefrom.	2326	13th Aug. 1867	Silvester Rait Wybrants.
Apparatus for compressing air and for working pneumatic railways.	2978	23rd Oct. 1867	Frederic Seiler.
Improvements in rotary engines applicable as motors, pumps, meters and for other purposes, also in indicators applicable to such and other engines or meters and other purposes. (*Communicated by Arthur Perry Emery.*)	3219	13th Nov. 1867	Alfred Vincent Newton.
Packing for the piston heads of steam cylinders - (*Communicated by Horace M^{c}Murtrie.*)	3293	21st Nov. 1867	William Robert Lake.
Improvements in steam and other motive-power engines and in valves for engines - -	3299	21st Nov. 1867	William Robert Green. John George Freeman.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PISTONS, &c.—*continued.*			
Construction of hand garden engines and hydropults. (*piston rods.*)	3423	2nd Dec. 1867	Robert William Page.
Improvements in elastic packings for the pistons of steam-engines and for other purposes, and in the machinery employed in the manufacture of such packings.	3495	9th Dec. 1867	Edward Keirby.
Certain improvements in steam-engines - -	3512	11th Dec. 1867	George Holcroft. William Nathan Dack.
Steam cylinders and the peculiar arrangement of the mechanism connected therewith.	3530	12th Dec. 1867	Noah Paxman, jun^{r}.
Metallic pistons for steam cylinders, air cylinders or pumps.	3685	28th Dec. 1867	Jacob Goodfellow.
Improvements in motors or apparatus for generating motive-power, and in the method of applying the same to produce useful effect. (*Communicated by Benjamin Talbot Babbitt.*)	3690	28th Dec. 1867	William Edward Newton.
PLANTS, TREES, SEA-WEEDS, &c. (*Treatment of*).			
Facilitating the removal of the bark from oak and other woods. (*Communicated by Le Vicomte Louis de Villermont.*)	44	7th Jan. 1867	William Edward Newton.
Treating vegetable substances chiefly applicable to the manufacture of paper pulp and fibres. (*Communicated by Benjamin Chew Tilghman.*)	385	11th Feb. 1867	William Edward Newton.
Treatment or preparation of straw and other fibrous materials for the manufacture of paper.	647	7th March 1867	Edward Lloyd.
A new and improved means of preserving solutions of certain plants and matters in a concentrated state. (*Communicated by Clémence d'Estains, widow of Léon de Wailly.*)	684	11th March 1867	Henri Adrien Bonneville.
Disaggregation of china grass, hemp, flax, jute, phormium tenax and other vegetable fibres, for the production of threads, fabrics, and pulp for paper. (*Communicated by François Mathurin Caillard.*)	799	19th March 1867	William Clark.
Improvements in the treatment and preparation of fibrous substances or vegetable matters as pulp for the manufacture of paper, and in apparatus for the same.	1455	17th May 1867	Julien Denis.
Mode of treating flax, hemp and other fibrous plants for the purposes of spinning. (*see* "SPINNING.")	2104	18th July 1867	Nicholas John Oliver Stubber.
Treatment of seaweed for obtaining valuable products from it.	2436	26th Aug. 1867	Edward Sonstadt.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PLANTS, &c.—*continued.*			
A new or improved material to be employed in the manufacture of cord, rope, lace, paper, cardboard, pasteboard and other articles. (*mulberry bark.*)	3520	11th Dec. 1867	Faustino Vita.
The manufacture of a vegetable substitute for animal hair, from a product not hitherto used for that purpose. (*Communicated by Werner Staufen.*)	3707	31st Dec. 1867	Marc Antoine François Mennons.
See also "FIBRES."			
PLATES, DISHES, CUPS AND SAUCERS; SALT CELLARS, TRAYS, CRUET-FRAMES.			
Improvements in cruet frames, liquor frames and other frames for holding bottles and vessels, and in the bottles and vessels to be held by the said frames.	415	14th Feb. 1867	George Ireland.
Certain improvements in the method and apparatus for keeping warm glues, starches, gums and other liquids, which is also applicable for keeping other articles warm. (*used as a dish cover.*)	1208	26th April 1867	Tempest Booth.
Manufacture of articles of earthenware - - (*dishes.*)	1538	23rd May 1867	Thomas Goodwin Green.
Appliances for serving mustard - - -	1552	24th May 1867	James Murdoch Napier.
Improvements in cruet frames, liquor frames, pickle frames, and other frames for holding bottles and vessels, and in the bottles and vessels to be held in the said frames.	1711	11th June 1867	Charles Toft.
An improved apparatus for holding and lifting plates and dishes. (*Communicated by Howard Tilden.*)	1782	18th June 1867	Thomas Brown.
Manufacture of bails or handles for articles or vessels of hollow ware. (*for bowls, scoops, &c.*)	1797	20th June 1867	David Jones.
An improvement in dredging and spice boxes - (*Communicated by George Washington Putnam.*)	2971	22nd Oct. 1867	Alfred Vincent Newton.
A new or improved butter basket - - (*and dish or holder.*)	3269	18th Nov. 1867	John Colebrook.
An improved sprinkler for powdered substances - (*salt, pepper or spices.*) (*Communicated by George Jones.*)	3374	28th Nov. 1867	Edward Thomas Hughes.
An improved method of constructing a castor for containing pepper, salt or other condiments for domestic use.	3414	2nd Dec. 1867	George Heiron.
Apparatus or appliances for serving mustard and other condiments.	3519	11th Dec. 1867	James Murdoch Napier.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PLOUGHING, DIGGING, CLOD-CRUSHING, LAND-ROLLING, HARROWING; AGRICULTURAL IMPLEMENTS; TILLING AND CULTIVATING LAND.			
Improvements in constructing quays, jetties, piers, sea walls and breakwaters, in the formation of reservoirs, dock basins, coast harbours, harbours of refuge, light-houses and sea batteries, applicable also for the reclamation of land and for the building of bridges.	79	11th Jan. 1867	Henry Buss.
Wheel gearing - - - - - - (*agricultural wheels.*) *Communicated by Carl Vilhelm Schröder and Frederik Julius Jörgensen.*)	208	26th Jan. 1867	Peter Jensen.
Engines and machinery employed in tilling land -	300	2nd Feb. 1867	David Greig. Robert Burton. Frederick Parker.
An improved steam roller, also applicable as a traction engine and portable engine.	347	7th Feb. 1867	William Thomas Carrington.
Motive-power engines - - - - - (*for agriculture.*)	474	21st Feb. 1867	John Weens. Thomas Robertson.
Improvements in tilling and cultivating land by steam power, and in machinery or apparatus for such purposes.	497	23rd Feb. 1867	John Phillips-Smith.
Rollers for rolling land - - - - -	725	13th March 1867	George Rumbelow. Henry Kendall.
Improvements in rotary digging machines and in teeth for the same. (*Communicated by George Granville Lobdell.*)	859	25th March 1867	George Davies.
Improvements in cultivating land and in apparatus employed therein.	862	25th March 1867	Robert Higgins.
Improvements in the construction of sea walls, quays, jetties, piers and roadways, in the reclamation of land, in the formation of docks, reservoirs, basins and coast harbours.	1018	5th April 1867	Henry Buss.
Ploughs - - - - - - -	1094	12th April 1867	Henry Bouthillier de Beaumont.
Improvements in ploughs and other agricultural implements, parts of which improvements are also applicable to wheeled carriages.	1130	16th April 1867	Robert Boby.
Construction of horse rakes - - - -	1157	20th April 1867	Edward Howell. Thomas Hardy.
An improved construction and manufacture of the iron forks used in agriculture. (*Communicated by Louis Gabriel Hébert Fleury.*)	1168	22nd April 1867	William Edward Gedge.
Horse-hoes - - - - - - - -	1184	24th April 1867	William Freeman Wilkinson.
A new and improved weeding apparatus - - (*Communicated by Robert Duflocq.*)	1312	4th May 1867	Henri Adrien Bonneville.
Certain improvements in the manufacture of plantation and other hoes, and which said improvements are also applicable to the manufacture of other implements and tools - - - - (*rakes.*)	1354	8th May 1867	James Fairley. Alfred Fairley.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PLOUGHING, &C.—*continued.*			
A new or improved combined apparatus for sowing seeds, hoeing, raking and other horticultural purposes.	1452	16th May 1867	James Griffiths.
A combined seeder, cultivator and roller - - (*Communicated by James Page Long and Peter Low.*)	1571	28th May 1867	Edward Thomas Hughes.
An improved machine or plough for clearing or grubbing up uncultivated land.	1573	28th May 1867	Florent Joseph Vandenvinne.
Anchors suitable for steam ploughs and implements	1829	22nd June 1867	Joseph Surridge.
Certain improvements in agricultural apparatus called "horse rakes" - - - - - (*see* "REAPING.")	2060	13th July 1867	Rueben Sims. John Prest.
Ploughs - - - - - -	2088	16th July 1867	Thomas Pirie.
Construction of mould boards for ploughs - - (*Communicated by Leman Philander Rider.*)	2160	25th July 1867	William Edward Newton.
Agricultural implements for digging potatoes, for grubbing, for forming drills and for similar uses.	2176	27th July 1867	Thomas Reid.
Machinery or apparatus for digging potatoes, turnips and other roots.	2181	27th July 1867	Alexander Jack.
An improved plough - - - -	2210	31st July 1867	Michael Puddefoot.
Harrows - - - - (*Communicated by Halsey Haley Monroe.*)	2251	3rd Aug. 1867	William Russell Grace.
Certain improvements in spades and shovels -	2380	19th Aug. 1867	Francis Parkes. George Parkes.
Improved means or apparatus for hoeing, thinning or chopping out turnips or any other root crops requiring such process.	2391	21st Aug. 1867	Charles Edward Hall.
An improved mode of and apparatus for hauling draining and other agricultural implements in the field, by steam power, and also an improved truck for mounting and carrying such implements from place to place.	2426	24th Aug. 1867	John Phillips-Smith.
Agricultural apparatus for spacing and digging roots.	2427	24th Aug. 1867	John Hanson.
Construction of horse rakes - - -	2583	12th Sept. 1867	James Wilderspin.
Improvements in drill sowing-machines, in horse rakes and in horse hoes.	2639	19th Sept. 1867	Joseph Henry Sams.
Implements for digging potatoes - - - (*Communicated by Clark Chase.*)	2697	25th Sept. 1867	William McIntyre Cranston.
Manufacture of hoes - - - -	2945	19th Oct. 1867	Francis Adkins.
Construction of horse ploughs - - -	3052	30th Oct. 1867	William Henry Angel Bowhay.
Digging machinery - - - -	3067	31st Oct. 1867	Ormrod Coffeen Evans.
Rotary spades or digging machines for tilling land	3199	12th Nov. 1867	John Thomas Brown Porter.
Excavating machines more especially designed for making ditches and drains. (*Communicated by Henry Charles Ingraham.*)	3500	9th Dec. 1867	William Robert Lake.
Hay-making machines, horse hoes, horse rakes and other analogous agricultural implements or machines.	3538	12th Dec. 1867	Robert Boby.
Machines for making drains or trenches - -	3583	17th Dec. 1867	Thomas Volkert Mackintosh.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PRESERVING AND HARDENING WOOD, METAL, STONE, SKINS AND OTHER SUBSTANCES.			
Preserving animal or vegetable matters, whether fluid or solid, in a wholesome and edible condition, without material loss or change of their natural flavor. (*or for dissection or specimens.*) (*Communicated by Lewis Hobart Spear.*)	379	9th Feb. 1867	William Clark.
An improvement in packing and preserving animal size.	607	5th March 1867	John Cowdery Martin.
An improved composition for coating or covering the surface of iron, wood, stone, brickwork and other substances or materials, to prevent oxidation and decomposition thereof.	657	8th March 1867	James Turner.
A new and improved means of preserving solutions of certain plants and matters in a concentrated state. (*Communicated by Clémence d'Estains, widow of Léon de Wailly.*)	684	11th March 1867	Henri Adrien Bonneville.
A method of protecting the outer surface or external parts of iron ships from corrosion or from animal or vegetable matter - - - - -	745	15th March 1867	Joseph Westwood. Robert Baillie.
Improvements in the preparation and application of isolating compositions for the protection of metallic surfaces from oxidation, and for the preservation of wood and other materials, and in the preparation of the residue of vegetable oils to be employed for such purposes.	814	21st March 1867	Giacomo Eduardo Marchisio.
Compositions to be applied as coatings to preserve the surfaces of metals, wood, stone and all such like materials.	1113	13th April 1867	Robert Alexander.
Improvements in the construction of a steam vessel suitable for ferrying laden trains across the ocean, complete, together with its landing-places, breakwaters, and modes of protection from marine insects and fouling, which improvements are also generally applicable to other vessels, and to the protection of iron and wood exposed to the action of the sea water.	1503	21st May 1867	Edward Henry Cradock Monckton.
Covering buckles, saddle trees, turrets, hooks and other metallic trimmings for carriages and harness, with a coating of vulcanized or hard rubber, gutta-percha or other gum.	1630	1st June 1867	Andrew Albright.
An improved process of embalming and preserving animal substances from decay, for anatomical purposes.	1850	25th June 1867	Ludovico Brunetti.
A new or improved method of hardening plaster, plaster castings and the like.	2131	22nd July 1867	Bartholomew Philip Franzoni.
Preserving iron from oxidation. (*Communicated by Monsieur Alfred Delcelier.*)	2142	23rd July 1867	Hector Auguste Dufrené.
Improvements in the treatment and application of the residuum which results from the clarification and purification of cotton seed oil and other vegetable drying oils, and of the residuum which results from the distillation or other analogous treatment of the said material, for the manufacture and preparation of isolating preservative and anti-corrosive compositions.	2656	21st Sept. 1867	Giacomo Eduardo Marchisio.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PRESERVING WOOD, &c.—*continued.*			
A new or improved composition to be used to prevent the oxidation of iron, the fouling of ships' bottoms and other submerged things, and preserving wood from decay and from worms, and also preserving iron and wood exposed to the action of the atmosphere.	2848	10th Oct. 1867	Thomas Blackhurst.
An improved process and composition for the preservation from decay of stone, brick, plaster, metal and other substances, and for hardening or glazing their surfaces so as to prevent smoke or dirt from adhering to them.	2919	17th Oct. 1867	James Cubitt.
Improved modes of and means for curing, drying, preserving and packing meat, fruit, vegetables and other perishable substances. (*curing hides.*) (*Communicated by Daniel E. Somes.*)	3006	25th Oct. 1867	William Robert Lake.
Compositions for coating the bottoms of iron, steel and wooden ships and other navigable vessels, and marine works generally. (*preventing oxidation, &c.*)	3028	28th Oct. 1867	Joseph de Silva.
Improvements in the method or means for preserving pasty matters and substances, and apparatus therefor. (*Communicated by Edouard Charton.*)	3129	6th Nov. 1867	Henri Adrien Bonneville.
Treating casks in order to render them impervious -	3207	12th Nov. 1867	John Dillon Scally.
Vessels and apparatus for the preserving and more convenient use of unguents.	3378	28th Nov. 1867	James Murdoch Napier.
An improved mode of accelerating the induration of certain descriptions of concrete or artificial stone. (*Communicated by Johann Georg Wilhelm Picker.*)	3708	31st Dec. 1867	Marc Antoine François Mennons.
PRESERVING AND PREPARING ARTICLES OF FOOD, CURING BACON, CUTTING AND MINCING MEAT; SAUCES, CONDIMENTS AND PICKLES; PARING CUCUMBERS, STONING RAISINS.			
A new or improved article of food for infants and invalids. (*Partly communicated by Baron Justus Von Liebig.*)	250	30th Jan. 1867	Elise Von Lesner Ebersburg.
Metallic cases for preserved food - - (*Communicated by Joseph Jean Marie Rebours.*)	321	5th Feb. 1867	John Henry Johnson.
Preserving meat, poultry and game - -	378	9th Feb. 1867	Edouard Gorges.
Preserving animal or vegetable matters, whether fluid or solid, in a wholesome and edible condition, without material loss or change of their natural flavour. (*Communicated by Lewis Hobart Spear.*)	379	9th Feb. 1867	William Clark.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PRESERVING FOOD, &c.—*continued.*			
Improvements in cruet frames, liquor frames and other frames for holding bottles and vessels, and in the bottles and vessels to be held by the said frames. (*pickle jars.*)	415	14th Feb. 1867	George Ireland.
An improved mixing apparatus, also applicable to beating eggs and to other similar purposes.	637	7th March 1867	Alfred Giles.
Manufacture of boxes for containing, preserving and transporting butter and cheese and other articles. (*Communicated by William Bellamy Guernsey.*)	740	14th March 1867	William Edward Newton.
Improvements in coolers for wine and other liquids and substances, and in vessels for protecting liquids and other substances from undesired effects of the atmosphere or atmospheric temperature, also in covers or stoppers for the same and other articles. (*milk, butter, &c.*)	817	21st March 1867	Henry Clifton.
Refrigerators, ice safes and preserving cabinets -	818	21st March 1867	Henry Clifton.
Preservation of animal and vegetable substances -	846	23rd March 1867	John Gamgee. Arthur Gamgee.
An improved process for manufacturing ice and for other refrigerating purposes. (*for preservation of meats, &c.*) (*Communicated by Thaddeus Sobeski Carlincourt Lowe.*)	952	30th March 1867	William Edward Newton.
A new or improved process of preserving meat, fish and other substances. (*Communicated by Francesco Cirio.*)	1200	25th April 1867	Clinton Edgcumbe Brooman.
An improved nutmeg-grater - - - (*Communicated by Henry Josiah Griswold.*)	1287	2nd May 1867	William Robert Lake.
An improved egg beater, the same being applicable for mixing liquors and for other like purposes. (*Communicated by Howard Tilden.*)	1374	9th May 1867	Thomas Brown.
Improvements in or additions to egg boilers for the table - - - -	1424	14th May 1867	Benjamin Barrett. Henry Mackenzie.
Preserving meat, fruit and vegetables - -	1493	20th May 1867	Edward Henry Cradock Monckton.
Improvements in preserving grain and in the construction of the granaries to contain the same. (*see* "THRASHING.")	1527	22nd May 1867	Antoine Martin.
Improvements in the means of cooling beverages, also applicable for preserving substances from the action of heat. (*Communicated by Auguste Charles Joseph Lengelée and Paul Fréderic Rozée.*)	1751	15th June 1867	Alexander Melville Clark.
An improved tool for opening metallic cases - (*of preserved food.*) (*Communicated by A. Hilger.*)	1852	25th June 1867	James Buckingham.
Improvements in the mode of preserving butter and substances of a similar nature, and in the apparatus or means employed therein. (*Communicated by Adolphe Huillard.*)	1942	3rd July 1867	John Henry Johnson.
Apparatus for cutting or mincing meat, vegetables and other substances. (*Communicated by David Lyman.*)	2051	12th July 1867	John Henry Johnson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PRESERVING FOOD, &c.—*continued.*			
Preservation of meat and animal substances -	2079	15th July 1867	Theophilus Redwood.
Preserving substances for food - - -	2238	2nd Aug. 1867	James Dewar.
Milk cans - - - - - (*for preserving milk.*)	2495	3rd Sept. 1867	Louis Napoleon Le Gras.
Amalgamation or combination of animal with vegetable food.	2661	21st Sept. 1867	David Thorpe Lee.
Apparatus to be used for boiling eggs and for like purposes.	2750	30th Sept. 1867	Ira Dimock.
Preserving potatoes - - - -	2753	30th Sept. 1867	James Dewar.
Machinery or apparatus for washing and cleaning currants and raisins or other similar fruit.	2814	7th Oct. 1867	Henry Faulder.
Improved modes of and means for curing, drying, preserving and packing meat, fruit, vegetables and other perishable substances. (*Communicated by Daniel E. Somes.*)	3006	25th Oct. 1867	William Robert Lake.
An improved mode of and apparatus for exhausting or rarefying the air in vessels for food-preserving, distilling and other purposes. (*Communicated by James Gordon and John Archbald.*)	3069	31st Oct. 1867	William Robert Lake.
Improvements in the method or means for preserving pasty matters and substances, and apparatus therefor. (*Communicated by Edouard Charton.*)	3129	6th Nov. 1867	Henri Adrien Bonneville.
Combination and mode of treating and employing certain preparations for various articles of food -	3275	19th Nov. 1867	William Juby Coleman. Alfred Coleman.
Improvements in preserving meat and in apparatus employed therein. (*Communicated by Thomas Sutcliffe Mort.*)	3323	23rd Nov. 1867	William Mort.
An improved cutting implement more especially designed for opening cases or cans formed of sheet metal. (*preserve cans.*)	3365	27th Nov. 1867	Milton Alexander Hamilton.
An improved process for the reduction of tin so as to render it applicable for coating metals and for other purposes. (*covers for preserves.*) (*Communicated by Jules Feuquières.*)	3517	11th Dec. 1867	Alexander Melville Clark.
PRESSES, COMPRESSING, PACKING AND ARRANGING.			
Cotton bale ties - - - - - (*Communicated by John Cooper Lee.*)	175	23rd Jan. 1867	William Edward Newton.
Packing bales and boxes of goods - - -	200	25th Jan. 1867	James Clark.
Improved means of fastening and better securing bullion boxes, boxes and other like packages used for containing and conveying other valuable commodities.	282	1st Feb. 1867	Frederick Ashford.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PRESSES, &c.—*continued.*			
An improved self-fastening buckle or tie to be used in fastening hoops or bands of metal round bales of cotton, wool and other merchandize capable of being packed in bales. (*Communicated by Charles William Wailey.*)	311	4th Feb. 1867	James Dunwoody Bulloch.
Certain improvements in machinery or apparatus for pressing and shaping hats, bonnets or coverings for the head, made from straw or other materials.	345	7th Feb. 1867	Samuel Howard.
Machinery for moulding and pressing bricks - (*Communicated by Emery Ross Gard.*)	403	13th Feb. 1867	William Clark.
An improved machine or machinery for packing a certain kind or description of friction match.	414	14th Feb. 1867	John Victor Toepken.
Machinery for the manufacture of boots, shoes and other coverings for the feet - - (*presser.*)	418	14th Feb. 1867	Thomas Greenwood. John Keats.
Filtering presses for expressing the liquid parts and retaining the solid parts of any semi-liquid substances. (*Communicated by Pierre Du Rieux and Edouard Roettger.*)	587	2nd March 1867	Edward Thomas Hughes.
An improved method of fastening the iron bands for packages, cases or boxes containing goods.	595	4th March 1867	Thomas James Binfield.
An improvement in packing and preserving animal size.	607	5th March 1867	John Cowdery Martin.
Couplings for baling bands - - - - (*Communicated by George Newton Beard.*)	630	6th March 1867	Alfred Vincent Newton.
An improved construction of bale tie or fastening - (*Communicated by Osborne Macdaniel.*)	751	15th March 1867	Alfred Vincent Newton.
Ironing, pressing, finishing and damping machinery	793	19th March 1867	James Moore Clements.
Improvements in machinery or apparatus for raising, lowering and moving heavy bodies, which improvements are also applicable for operating punching machines, screw presses, and the feed motion of circular and other saws and wood planing machines.	822	21st March 1867	James Alfred Limbert.
Improvements in metal ties or bands for securing bales of cotton or other substance, and in machinery employed in the manufacture of the same.	858	25th March 1867	Henry Fassmann.
Machinery for the manufacture of hats or coverings for the head.	942	30th March 1867	Joseph Edwin Ward.
Apparatus for expressing oils and fatty matters, and for forming and marking the cake produced in the manufacture.	967	1st April 1867	John Harker.
Machinery or apparatus for obtaining and applying motive-power. (*as hydraulic pressure.*)	984	2nd April 1867	Jean Albert Moll.
Mode or method of fastening bales of merchandize.	1036	6th April 1867	Thomas Holden Lucas.
Improvements in the manufacture of spoons, forks and other similar articles, and in apparatus or machinery to be employed therein, parts of which said apparatus or machinery are applicable to other manufactures. (*hydrualin presses.*)	1055	9th April 1867	Daniel Joseph Fleetwood.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PRESSES, &c.—*continued.*			
An improved pressing iron and appliance thereto for the use of tailors, hatters, laundresses, and also for domestic use - - - - (*see* "MANGLING.)	1065	10th April 1867	Francis Love. Thomas Davy. John Metcalf.
Typographic printing machines - - - (*Communicated by Auguste Hippolyte Marinoni.*)	1115	13th April 1867	William Clark.
Metal ties or bands for securing bales of cotton, wool and other substance.	1162	20th April 1867	Henry Fassmann.
Stillages employed in packing and baling presses -	1317	6th May 1867	William Bradbury.
An improvement or improvements in papering needles or making up needles for sale.	1318	6th May 1867	Bryan Hinton Smith.
An improved fastening for bands or hoops for baling cotton or other substances. (*Communicated by George Newton Beard.*)	1358	8th May 1867	William Robert Lake.
Method of and apparatus for treating or pressing paper, pasteboard and similar materials, after printing on the same - - - -	1365	8th May 1867	Rowland Wood. Austin Wood.
A machine or apparatus for removing the card boards, metallic plates or other substances, from the folds of fabrics, used in the process of pressing.	1430	15th May 1867	James Charles Ellison.
Machinery for folding sheets of paper or other fabric or material. (*pressing the sheets.*)	1502	21st May 1867	Joseph Davies.
Arming presses for producing devices on the covers of books and other articles.	1504	21st May 1867	John Gough.
Machinery for obtaining pressure - -	1528	22nd May 1867	Alfred Augustus Hely. John Marshall.
Typographic printing machines - - - (*Communicated by Auguste Hippolyte Marinoni.*)	1534	23rd May 1867	Alexander Melville Clark.
Cases for packing and transporting butter and other dairy produce.	1546	24th May 1867	Louisa Slatter.
A new or improved engine or machine for obtaining and applying motive-power. (*for working presses.*)	1604	30th May 1867	James Francombe.
Apparatus to be employed in expressing oils and fatty matters.	1716	11th June 1867	James Thom.
Manufacture of dies for stamping - - (*and for pressing.*)	1818	21st June 1867	William Price.
Filtering apparatus - - - - (*Communicated by Albert Ludwig Georg Dehne.*)	1860	26th June 1867	William Edward Newton.
Metal ties or bands for securing bales of cotton or other substance. (*Communicated by Richard G. Latting.*)	1880	27th June 1867	William Robert Lake.
Presses for stamping or endorsing - - (*Communicated by Edouard Cornélis.*)	1890	28th June 1867	Alexander Melville Clark.
Presses for cutting paper - - -	1920	2nd July 1867	James Robert Burn.
Hoop iron fastenings for bales - - - (*Communicated by Edmund Drinkwater Carver and George Ashcroft.*)	1972	5th July 1867	Henry Clifton Carver.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PRESSES, &c.—*continued.*			
Improvements in apparatus for indicating and registering the pressure of steam in steam generators, and the pressure in hydraulic presses and other vessels or chambers, which improvements are also applicable to indicating and registering pressure and vacuum in steam-engines, the vacuum in condensing apparatus, also to indicating and registering the combined pressure of the steam or other power employed to give motion to an engine, and the speed of such engine or other machinery, also to indicating and registering barometrical variations. (*Communicated by Bernhard August Schäffer and Christian Friedrich Budenberg.*)	2249	3rd Aug. 1867	Arnold Budenberg.
Improved apparatus for extracting oils from oleaginous seeds and nuts, and making oil cake or compound cake for cattle feeding.	2331	13th Aug. 1867	John Fawcett.
Metal ties or bands for securing bales of cotton or other substance. (*Communicated by John Wesley Hedenberg.*)	2353	15th Aug. 1867	William Robert Lake.
Coining presses - - - - -	2398	21st Aug. 1867	James Murdoch Napier.
Screw presses and apparatus for pressing and moulding soap, or for pressing, moulding, packing or stamping other materials.	2433	24th Aug. 1867	Frederick John Cleaver.
Improvements in fastening iron bands on bales, and in fasteners or ties for that purpose, and also in levers or implements to be used therewith for effecting the fastening. (*Communicated by Jones Saunders.*)	2444	27th Aug. 1867	Matthew Augustus Soul.
Improvements in and applicable to hydraulic and other presses, parts of which improvements may be employed for or with other descriptions of machinery - - - - -	2454	28th Aug. 1867	William Thomas Watts. Daniel Joseph Fleetwood.
Fastening or securing metal bands or hoops on cotton and other bales. (*Communicated by Daniel Swett.*)	2512	5th Sept. 1867	Louis Benjamin Pothier.
Improved apparatus for pressing and shaping cigar bunches.	2514	5th Sept. 1867	George Cope.
Presses for extracting liquid from hops, seeds and other substances.	2540	7th Sept. 1867	Hamilton Woods.
The production and manufacture of compressed leather and articles of leather.	2559	10th Sept. 1867	John Harcourt Brown.
Baling presses for pressing cotton and other substances.	2565	10th Sept. 1867	James Whittome.
Anvils - - - - - (*with power press.*) (*Communicated by James Ezekiel Emerson.*)	2578	11th Sept. 1867	William Edward Newton.
A new or improved material to be used as a substitute for oiled silk, bladders, gut-skins, india-rubber and other waterproof materials and leather. (*wrappers for tea, &c.*)	2604	14th Sept. 1867	John Jeyes.
Machinery for moulding, perforating and pressing bricks and other articles.	2791	4th Oct. 1867	Samuel Johnson.
An improved formation of wrapper or bale-cloth specially adapted for packing combed wool. (*Communicated by Houbart-Caruel.*)	2802	5th Oct. 1867	William Edward Gedge.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PRESSES, &c.—*continued.*			
Manufacture and packing of fire-lighters and artificial fuel.	2820	7th Oct. 1867	Henry Trotter.
Manufacture of pressed leather - - -	2977	23rd Oct. 1867	Frederick John Bugg.
Improved modes of and means for curing, drying, preserving and packing meat, fruit, vegetables and other perishable substances. (*Communicated by Daniel E. Somes.*)	3006	25th Oct. 1867	William Robert Lake.
Making moulds for the manufacture of metallic screws. (*for hydraulic presses.*)	3038	28th Oct. 1867	William Potts.
Valves for hydraulic presses and for other purposes	3055	30th Oct. 1867	Joseph Beverley Fenby.
Mats and matting - - - - (*or for packing or wrapping.*)	3092	2nd Nov. 1867	William Cooke. Walter Francis.
Machines for pressing or moulding bricks, tiles or other blocks. (*Communicated by John North.*)	3196	12th Nov. 1867	Henri Adrien Bonneville.
Improvements in the construction of packing cases, and in the mode of locking the same to secure them against clandestine opening.	3328	25th Nov. 1867	George Turner.
Improved apparatus for making extracts from bark and other substances. (*Communicated by James Warren Jones.*)	3358	27th Nov. 1867	Alfred Vincent Newton.
Machinery or apparatus for separating and cleaning seeds - - - - - (*preparing for the seed crusher.*)	3373	28th Nov. 1867	Thomas Rose. Robert Emerson Gibson.
Improved machinery for folding and pressing the edges of elastics used in boots and shoes. (*Communicated by Antoine Guérin.*)	3375	28th Nov. 1867	Edward Thomas Hughes.
Certain improvements in apparatus to be employed in connection with hydraulic or other packing presses.	3392	29th Nov. 1867	William Chadwick Houghton.
Certain improvements in the manufacture of waterproof or liquid-proof paper or glazed paper or fabrics. (*for packing.*)	3437	3rd Dec. 1867	John Thorpe.
Presses for stamping or endorsing - - (*Communicated by Edouard Cornelis.*)	3516	11th Dec. 1867	Alexander Melville Clark.
An improved process for the reduction of tin so as to render it applicable for coating metals and for other purposes. (*wrappers for eatables.*) (*Communicated by Jules Feuquières.*)	3517	11th Dec. 1867	Alexander Melville Clark.
Certain improvements in the method of and means for retaining the outer ends of tapes, ribbons and other similar narrow fabrics and paper.	3545	13th Dec. 1867	Gervase Marson.
Papering needles or making up packets of needles for sale.	3584	17th Dec. 1867	Alfred Shrimpton.
An improved method of and apparatus for the manufacture of tinned leaden pipes. (*Communicated by Augustin Henry Hamon.*)	3591	17th Dec. 1867	William Edward Newton.
Improvements in machinery for pressing cotton and for crushing and pressing other substances, the said machinery being adaptable for locomotion on railways or on common roads.	3635	21st Dec. 1867	Charles George Wilson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PRESSES, &c.—*continued.*			
Cotton ties used for banding or baling cotton and other substances. (*Communicated by John T. Butler.*)	3645	23rd Dec. 1867	William Walker.
Wrappers or envelopes for needles - -	3680	27th Dec. 1867	John Clarke.
Improvements in the mode of and machinery for making shot and shells for ordnance. (*compressing.*) (*Communicated by John Blake Tarr.*)	3688	28th Dec. 1867	Alfred Vincent Newton.
PRINTING AND TRANSFERRING; TYPE AND OTHER SURFACES FOR PRINTING; COMPOSING AND DISTRIBUTING TYPE.			
Machinery or apparatus for feeding paper to printing machines, and for taking off or removing and piling the same after printing - -	9	1st Jan. 1867	Alexander McGlashan. Arthur Brittlebank.
Production of printing and embossing surfaces from photographs.	45	7th Jan. 1867	Robert Howe Ashton.
Improved apparatus for regulating, controlling and for varying the speed of shafts and machinery. (*printing machines.*)	51	8th Jan. 1867	Robert Robinson.
Certain improvements in the art of making photographic transfers, adapted to the purpose of engraving or lithography, or of making plates or blocks from which to print the design or other matter transferred.	71	11th Jan. 1867	Arthur Guy Morvan.
Ornamenting, printing, cutting, creasing, bending, embossing and manufacturing articles from wood and other materials.	155	22nd Jan. 1867	Edward Tomlinson.
Printing names of subscribers on newspapers and other periodicals, and other printing purposes, known or called "Campbell's addressing machine." (*Communicated by James Alexander Campbell.*)	313	4th Feb. 1867	Conrad Van Dusen.
Printing on textile fabrics - - -	346	7th Feb. 1867	Robert Ellis Green. William Laycock.
Improved means of securing, fastening, or "locking up" type and other printing surfaces in "chases" for printing purposes, and of securing what are known as "formes" upon the printing tables.	353	7th Feb. 1867	William Conisbee.
Improvements in and adaptation of cylinder printing machines to the double purpose of letter press and lithography, also a new mode of damping litho stones, and a new mode of registering and pointing in such machines.	427	15th Feb. 1867	Thomas William Nicholson.
Preparation of threads and the manufacture of fabrics from the threads so prepared. (*printing knitted fabrics for future weaving.*) (*Communicated by Stanislas Vigoureux.*)	509	23rd Feb. 1867	Clinton Edgcumbe Brooman.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PRINTING, &c.—*continued.*			
Machinery or apparatus used in connection with calico-printing machines.	628	6th March 1867	William Tomlinson.
Improvements in stamps or presses for marking the prices of goods, part of which invention is applicable to other stamps or presses.	681	11th March 1867	Adam Millar.
Producing transparent pictures for exhibition in magic lanterns, by a cheaper and easier method than heretofore.	705	12th March 1867	Thomas Hatton.
An improved mode of and means for producing pictures, designs, letters and other characters or figures upon glass, metal, wood and other materials. (*transferring.*)	732	13th March 1867	Edward Lee.
Dyeing and printing - - - - -	743	15th March 1867	James Keymer. William Whitehead.
Lithographic stone grinding, graining, polishing, and ink and colour grinding apparatus.	775	18th March 1867	Thomas William Nicholson.
Printing hanks or skeins of silk, cotton, wool and other like fibrous materials. (*Communicated by Louis Charles Aubry.*)	795	19th March 1867	John Henry Johnson.
Certain improvements in printing telegraphs and in apparatus connected therewith. (*form of type.*)	816	21st March 1867	John Hawkins Simpson.
Machines for printing and indenting portions of railway tickets and for other like purposes - -	839	22nd March 1867	George Adams. William Thomas Whiteman.
Printing yarns - - - - - -	850	23rd March 1867	William James Hanson.
Improved means of producing designs upon paper (*for transferring.*)	947	30th March 1867	Walter Bentley Woodbury. Robert Howe Ashton.
Improved means of producing surfaces in relief or in intaglio for printing and other purposes. (*Communicated by André Adolphé Disderi.*)	968	1st April 1867	Clinton Edgcumbe Brooman.
A new method of bronzing metallic and other surfaces - - - - - -	979	2nd April 1867	Joseph Storey. William Edward Bickerdike. William Virgo Wilson.
"Tilloting" or wrappers for covering woollen fabrics known as "long ells" and Spanish stripes, suitable for the India and China markets. (*printing with roseine.*)	1090	12th April 1867	Joseph Walton Wallis.
Lithographic, zincographic and typographic printing machines - - - - - -	1093	12th April 1867	Charles Henry Gardner. Joseph Bickerton.
Typographic printing machines - - - - (*Communicated by Auguste Hippolyte Marinoni.*)	1115	13th April 1867	William Clark.
Machines or apparatus for printing from engraved plates, blocks, lithographic stones, or from other like printing surfaces. (*Communicated by Messieurs Kientzy, Sons, and Gedalge.*)	1116	13th April 1867	William Clark.
Machinery for winding yarns, and also for printing the same simultaneously with the process of winding, at option - - - - -	1135	17th April 1867	Joseph Wilcock Dalby. George Odam Chapman.
Machinery for printing or colouring yarns - -	1145	18th April 1867	George Ripley.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PRINTING, &c.—*continued.*			
Production of designs upon fabrics composed of fibrous materials - - - - (*see* "EMBOSSING.")	1182	23rd April 1867	Jesse Brickles. John Samuel Jackson. Walter Scott Berry.
Certain improvements in the method and apparatus for keeping warm glues, starches, gums and other liquids, which is also applicable for keeping other articles warm. (*useful for printers.*)	1208	26th April 1867	Tempest Booth.
Means or apparatus employed in printing - -	1361	8th May 1867	Thomas Jefferson Mayall.
Method of and apparatus for treating or pressing paper, pasteboard and similar materials, after printing on the same - - -	1365	8th May 1867	Rowland Wood. Austin Wood.
"Nature printing" from plants, leaves or other natural objects.	1432	15th May 1867	Henry Craven Baildon.
Single cylinder printing machines - - -	1444	16th May 1867	John Harper.
Intaglio plate printing machinery - - -	1447	16th May 1867	James Murdoch Napier.
Typographic printing machines - - - (*Communicated by Auguste Hippolyte Marinoni.*)	1534	23rd May 1867	Alexander Melville Clark.
Taking copies of lithographs, zincographs and other printed matters.	1562	27th May 1867	William Paul Metchim.
Improvements in producing letters in gold, silver and other metals on glass, and in implements employed for that purpose.	1589	29th May 1867	Frederick Joseph Brean.
An improved mode of producing printing blocks or surfaces for printing or staining various fabrics. (*Communicated by Thomas Crossley.*)	1599	29th May 1867	William Edward Newton.
Manufacture of printed "tapestry" carpets - (*see* "WEAVING.")	1607	30th May 1867	William Wood.
Treatment of fabrics made wholly or partly of jute, flax, cotton or vegetable fibres, so as to prepare them for dyeing or printing, and rendering them applicable for the manufacture of carpets or other printed goods. (*Communicated by Thomas Crossley.*)	1608	30th May 1867	William Edward Newton.
The facilitating the composition or arranging of type of various founts, for displaying jobs or other works usually required to be done in printing offices.	1631	1st June 1867	Enoch Tayler.
Machines for dating or printing of railway and other tickets.	1659	6th June 1867	James Adams.
Manufacture of type for printing - - (*Communicated by Eduard Heinrich Mayer.*)	1722	12th June 1867	John Frederick Boëtius. Jacob Eichhorn.
An improvement in machinery for rubbing or dressing printers' types.	1776	17th June 1867	Patrick Welch.
A new or improved machine for bronzing - -	1788	19th June 1867	Louis Simon.
Treatment of yarns intended to be printed - - (*Communicated by Charles Aubry.*)	1795	19th June 1867	John Henry Johnson.
Improvements in blankets used in machines for printing textile fabrics, and in the mode of joining together the ends of double woven fabrics. (*Communicated by Seth William Baker.*)	1889	28th June 1867	Edward Joseph Hughes.
Presses for stamping or endorsing - - (*Communicated by Edouard Cornélis.*)	1890	28th June 1867	Alexander Melville Clark.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PRINTING, &C.—*continued.*			
Improvements in textile fabrics and in the apparatus or means employed for effecting the same. (*printing warp threads.*)	1906	29th June 1867	Alexander Stewart.
Machinery or apparatus for printing hanks of yarns or threads with one or more colors - -	1925	2nd July 1867	Thomas Wood. John Wood.
Improvements in machines for ruling paper, part of which improvements is also applicable to guiding paper into printing and other machines -	1946	3rd July 1867	James Salmon. George William Hick.
Machinery for printing from a chain of types -	1948	3rd July 1867	John McAdams.
Machinery used for printing woven fabrics, warps, yarns and paper - - - - -	1975	6th July 1867	Frederick Andrew. Leonard Clarkson.
Preparation of canvas and other similar materials for enlarging, printing and developing objects from negatives or positives obtained by means of photography.	1994	8th July 1867	Julius Maria Loewe.
Machinery for printing consecutive numbers -	2084	16th July 1867	James Fraser.
Letterpress and lithographic printing machinery -	2113	18th July 1867	Adam Paton.
Improvements in transferring devices in lace and other fabrics and fac-similes of textures, on to printing surfaces, and in the application of the devices and textures obtained from such surfaces.	2136	22nd July 1867	Hermann Von Schlagintweit-Sakünlünski.
Means and apparatus for ornamenting, printing, coloring, enamelling, staining, cutting, creasing, bending and manufacturing articles from wood and other materials.	2139	23rd July 1867	Edward Tomlinson.
Certain improvements in the method of composing and distributing type, and in apparatus to be employed for such purposes.	2164	25th July 1867	Alexander Mackie.
Improvements in the construction of elastic rollers for squeezing yarns and fabrics and for other purposes - - - - (*for printing machines.*)	2174	27th July 1867	John Smith. William Schofield.
Printing presses - - - - (*Communicated by Edwin Allen.*)	2290	8th Aug. 1867	William Robert Lake.
Improvements in quoins or wedges for fixing type or blocks in their chases, and in appliances used therefor.	2321	13th Aug. 1867	Edward Score.
Means or apparatus for printing woven and other fabric or material.	2336	14th Aug. 1867	Charles Holliday.
An improved mode or improved means of coloring or ornamenting fabrics and other surfaces, and of preparing printing surfaces. (*Communicated by Charles Depoully.*)	2378	19th Aug. 1867	Clinton Edgcumbe Brooman.
Machinery for setting up and distributing printing types - - - -	2432	24th Aug. 1867	Pierre Kniaghininsky. Pierre Galahoff. Nicolas Ossipoff.
Improvements in textile fabrics and in the apparatus or means employed for effecting the same. (*printing warps.*)	2460	29th Aug. 1867	Alexander Stewart.
Treatment and method of preparing printed warps	2518	5th Sept. 1867	Edward Bernheim. George William Wilson. Edward Longworth.
Printing machinery - - -	2537	7th Sept. 1867	David Payne.
Printing textile fabrics - - -	2581	12th Sept. 1867	John Balfour Meldrum.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PRINTING, &c. — *continued.*			
Improvements in printing fabrics or in producing patterns thereon. (*by discharge.*)	2597	13th Sept. 1867	William Whitehead.
Means of tinting or coloring artificial flowers and foliage. (*Communicated by Octave Eugéne Fillion.*)	2644	20th Sept. 1867	Alexander Melville Clark.
A new or improved typographic-forme fixing apparatus.	2645	20th Sept. 1867	Francisque Theodore Marie Ange Guyon.
Improvements in printing yarns or threads and in apparatus to be used therefor - - -	2660	21st Sept. 1867	Albert Lungley Dickins. Harvey Heywood.
Improvements in washing rollers and blankets used by printers, and in the machinery or apparatus employed therefor.	2667	21st Sept. 1867	Thomas Muir.
Mechanism or apparatus for distributing printers' type ready for hand or machine composing.	2800	4th Oct. 1867	Robert Hattersley.
Improvements in preparing the surfaces of paper or other material for drawing purposes, and in the application of the same to lithographic and other kinds of printing.	2844	9th. Oct. 1867	Thomas Nelson.
Improvements in looms and in the method or process of preparing weft that will enable the plain loom to weave "checks" or stripe goods - (*printing or dyeing parti-coloured.*)	2926	18th Oct. 1867	John Hill. Sampson Shelley.
An improved method for producing from one piece of writing paper, a sheet of note or letter paper and an envelope to enclose the said sheet of paper, also for other improvements connected therewith.	2966	22nd Oct. 1867	Nicolas Alfred Thoumelet.
Manufacture of ornamental fabrics - -	2985	24th Oct. 1867	James Thom. Alexander Maclure.
Improvements in apparatus for the manufacture of postage stamps and other labels, and for reproducing designs on paper or fabrics, and in the preparation of engraved surfaces to be used therefor. (*Communicated by Eugène Bordes, junior.*)	3009	25th Oct. 1867	Alexander Melville Clark.
Improvements in machines for printing from copper, steel and other metal plates, applicable also for printing from lithographic stones - -	3034	28th Oct. 1867	Alfred James Waterlow. Walter Blandford Waterlow. Sydney Hedley Waterlow.
Method of tinting or colouring photographs, engravings, water colour and other drawings, or porcelain.	3057	30th Oct. 1867	Frederick Piercy.
Counter-check books - - - -	3096	4th Nov. 1867	James Fraser. George Duncan.
An improved machine for forming, printing and counting labels.	3147	7th Nov. 1867	Isaac Hewitt.
Certain improvements in printing or producing patterns or designs on woven fabrics. (*Communicated by P. Duguait Dubourg.*)	3160	8th Nov. 1867	Paul Hardy Nathan.
Machinery for setting types - - - (*Communicated by Joseph Thorne.*)	3164	8th Nov. 1867	George Tomlinson Bousfield.
Improvements in cylinder printing machines, more especially designed for producing coloured patterns upon textile fabrics and paper hangings. (*Communicated by George Henry Babcock, Joseph Potter Manton and Jonathan Boyd.*)	3186	11th Nov. 1867	William Robert Lake.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PRINTING, &c.—*continued.*			
Printing rollers used for printing colours on hanks of yarns or threads - - - -	3210	13th Nov. 1867	Frederick Andrew. Ellis Whittaker.
Machines for printing calico and other fabrics -	3257	16th Nov. 1867	James Murdoch Napier.
Means or apparatus for accumulating and delivering sheets of paper or other fabric received from a printing press or other supply.	3330	25th Nov. 1867	Thomas Jefferson Mayall.
Ornamenting gauze and other fabrics - - (*Communicated by Eugène Siess.*)	3357	27th Nov. 1867	Alexander Melville Clark.
Apparatus for composing and distributing type -	3363	28th Nov. 1867	Alexander Mackie.
Improved combined machinery for printing -	3387	29th Nov. 1867	James Fraser. George Duncan.
Certain improvements in the manufacture of water-proof or liquid-proof paper or glazed paper or fabrics. (*as a printing surface.*)	3437	3rd Dec. 1867	John Thorpe.
Apparatus for dating railway and other tickets -	3465	5th Dec. 1867	James Adams.
Manufacture of mohair and similar fabrics - (*printing the warp.*)	3540	12th Dec. 1867	James Robinson.
Treatment of gutta-percha, indian-rubber, Honduras gum, and the other allied gums, for the production of a preparation or preparations applicable as a varnish, cement, paint, stain, water and air-proof material, solid or elastic material and for other purposes. (*substitute for type, &c.*) (*Communicated by Daniel Reed.*)	3542	13th Dec. 1867	Edward Reed Sintzenich.
Cylindrical chromo-lithographic and typographic printing machines.	3570	14th Dec. 1867	William Conisbee.
Improvements in the application of stereotyped and electrotyped editorial and other literary compositions, articles, compilations, paragraphs and advertizements manufactured in one locality or town, for the purpose of printing from the same on sheets of paper to form newspapers, magazines, serial and other periodical publications or works, or parts of such said publications, in another locality or town, and in the conveyance therefrom and thereto of such stereotyped and electrotyped editorial and other literary compositions, articles, essays, compilations, reproductions, paragraphs and advertizements, and in the arrangement and intermixture of such stereotyped and electrotyped editorial and other literary compositions, articles, compilations, paragraphs and advertizements so conveyed, with ordinary types, compositions in presses, and printing therefrom on paper to form newspapers, magazines, serial and other periodical publications or works, when conveyed from one county or town to another.	3593	18th Dec. 1867	William Vaile.
An improved colouring matter chiefly applicable for dyeing and printing purposes. (*Communicated by Jean Théodore Coupier.*)	3657	24th Dec. 1867	Alexander Melville Clark.
Printing certain textile fabrics and yarns - -	3663	26th Dec. 1867	John Lightfoot.
Improvements in blankets used in machines for printing textile fabrics, and in the mode of joining together the ends of double-woven fabrics. (*Communicated by Seth William Baker.*)	3674	27th Dec. 1867	Edward Joseph Hughes.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PRINTING, &c.—*continued.*			
A mechanical tell-tale alarm pointing and reporting clock. For Engraving Cylinders, *see* "ENGRAVING." For Telegraphic Printing, *see* "TELEGRAPHS." For Printing-colours, *see* "DYES."	3693	28th Dec. 1867	Lewis Hasluck.
PROPELLING, DRIVING, WORKING; TRANSMITTING POWER AND MOTION; CONVERTING MOVEMENTS.			
I.—Propelling Ships; Locomotion on Water; Propellers, Paddle-wheels and Screws.			
Improvements in the construction of ships and other navigable vessels, and in the mode of rigging, propelling and steering the same, including children's toy ships.	95	14th Jan. 1867	Robert Atkin.
The use or adaptation of water pipes or syphons in combination with turbine wheels or other hydraulic engines, for the production of motive-power for propelling ships.	135	18th Jan. 1867	Richard Robert Loane Rosoman.
An improved apparatus for transmitting power - (*driving screw propellers.*)	248	30th Jan. 1867	Thomas Charles Entwistle.
Propellers for ships, boats and other vessels - (*Communicated by Auguste Arban the elder and Marquis Marie Joseph Antoine Ernest De Lagrange.*)	362	8th Feb. 1867	John Henry Johnson.
Apparatus for obtaining and applying motive-power. (*for propelling ships.*) (*Communicated by Gerolamo Cavanna.*)	393	12th Feb. 1867	William Clark.
An improved means or apparatus to be used for travelling through the atmosphere and on land and water.	473	21st Feb. 1867	Joseph Meyers Kaufmann.
Improvements in propelling vessels, which improvements are also applicable to raising or forcing fluids.	479	21st Feb. 1867	William Hale.
Manufacture and construction of wheels - - (*for propelling vessels.*)	567	28th Feb. 1867	George Fitzjames Russell.
Improvements in propulsion and in rotary apparatus for giving motion or energy to fluids and receiving motion or energy from them.	696	11th March 1867	Matthew Piers Watt Boulton.
A certain improved mode of applying screw propellers, by means of which a greater efficiency is obtained.	739	14th March 1867	James Ferguson.
Propelling boats, ships and other vessels - -	749	15th March 1867	Percy Crause.
Improvements in propelling vessels and in apparatus employed therein. (*Communicated by Richard Dover Chatterton.*)	890	27th March 1867	Clinton Edgcumbe Brooman.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PROPELLING, &C.—*continued.*			
Improvements in apparatus for receiving motion or energy from fluids and for imparting it to them, and in the propulsion of vessels, and apparatus to be used for that purpose.	915	28th March 1867	Matthew Piers Watt Boulton.
An improved mode of and apparatus for rowing boats on water.	943	30th March 1867	Edward Stewart Jones.
Improvements in apparatus to be used for towing ships or vessels, and in apparatus for laying submarine telegraph cables.	1015	4th April 1867	James Maze Kilner.
Apparatus for propelling vessels - - -	1039	6th April 1867	Walter Watson Hughes.
Apparatus for propelling vessels - - -	1085	11th April 1867	Reginald Courtenay.
Apparatus for propelling vessels - - - (*Communicated by Eugene Bachelier.*)	1096	12th April 1867	William Clark.
An improvement in the shape of and in the manner of applying the marine screw propeller.	1247	30th April 1867	Henry Spink Swift.
Improved apparatus for obtaining motive-power -	1291	3rd May 1867	Henry William Grylls. Henry Neville. Joseph William Brooks. James Holt.
Improvements in the construction of landing stages and iron ships or vessels, also in propelling and steering ships or vessels generally.	1309	4th March 1867	Evan Leigh.
Apparatus for propelling vessels - -	1423	14th May 1867	Charles Randolph.
Improvements in the construction of a steam vessel suitable for ferrying laden trains across the ocean, complete, together with its landing-places, breakwaters, and modes of protection from marine insects and fouling, which improvements are also generally applicable to other vessels, and to the protection of iron and wood exposed to the action of the sea water.	1503	21st May 1867	Edward Henry Cradock Monckton.
An improved means or apparatus to be used for travelling through the atmosphere and on land and water, part of which apparatus is equally applicable to other purposes.	1525	22nd May 1867	Joseph Meyers Kaufmann.
Improvements in or connected with screw propellers - - - - -	1567	27th May 1867	William Henry Whettem. Edmund Walker.
Construction of paddle-wheels - - - (*Communicated by William Henry Holland.*)	1644	4th June 1867	George Davies.
An improved propeller for steam-ships and other vessels.	1697	8th June 1867	Henry Rolle.
Machinery or apparatus for obtaining motive-power and applying the same to vehicles on common roads and to other useful purposes.	1705	10th June 1867	James Conolly.
Apparatus for obtaining motive-power from rivers or streams of water, and for facilitating boats ascending and descending rivers or streams. (*Communicated by Louis Roman.*)	1831	22nd June 1867	Joseph Longo Vinchiaturo le Marquis de Cosentino.
Construction of screw propellers - - -	1912	29th June 1867	Edward Simmons.
Propelling vessels - - - -	1943	3rd July 1867	Henry Clarke.
Apparatus for propelling vessels - -	1958	4th July 1867	Henry Clarke.
An improved combined ship's propeller and steerer (*Communicated by Frank G. Fowler.*)	1963	4th July 1867	Alfred Vincent Newton.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PROPELLING, &c.—*continued.*			
Mode of constructing and propelling steam-vessels (*Communicated by Stephen Johnson Gold and Henry James Weston.*)	2178	27th July 1867	Edward Thomas Hughes.
Propelling and steering vessels - - -	2205	30th July 1867	Charles Mayo.
Machinery for propelling vessels and aërial conveyances by reaction.	2223	1st Aug. 1867	Richard Boyman Boyman.
Apparatus for propelling vessels and pumping or raising water.	2254	3rd Aug. 1867	Walter Watson Hughes.
Improved gear for actuating screw and other like propellors of navigable vessels, by manual, animal or motive-power engine, and for elevating, lowering, connecting or disconnecting such propellors.	2322	13th Aug. 1867	John James Bright.
Apparatus for propelling vessels - - -	2352	15th Aug. 1867	Henry Bodart. Alfred Sigodart.
Crank motions - - - - - - (*Communicated by Thomas Taylor.*)	2379	19th Aug. 1867	William Edward Newton.
Improvements in an apparatus for preserving life in water, and propelling, floating or manœuvering in water any body, vessel or mechanical contrivance, and for floating or manœuvering in the air any mechanical contrivance.	2397	21st Aug. 1867	John Goucher.
Hand screw propellers - - - - -	2443	27th Aug. 1867	Jacques Auguste Alfred Etaix.
Apparatus for starting, propelling and stopping railway trains or carriages, and ships or vessels.	2465	29th Aug. 1867	William Muir.
An improved submerged propeller for navigable vessels.	2473	30th Aug. 1867	Isaac Dixon.
Improved apparatus for propelling ships and other vessels, and for actuating machinery applicable to other purposes.	2476	31st Aug. 1867	John Armitage Brown.
Paddle wheels for water craft - - - (*Communicated by William Robinson Manley.*)	2506	4th Sept. 1867	George Tomlinson Bousfield.
Propelling boats, ships and other vessels - -	2605	16th Sept. 1867	Percy Crause.
Method of and apparatus for obtaining and applying motive-power.	2633	19th Sept. 1867	William Jeremiah Murphy.
Construction and mode of propelling and maneuvering floating batteries and other vessels intended for the purposes of naval defence and attack.	2743	28th Sept. 1867	John Elder.
Apparatus for propelling vessels - - - (*Communicated by Reginald Courtenay.*)	2849	10th Oct. 1867	Arthur Fane Hobhouse.
Apparatus for obtaining power from rivers or streams of water, and for facilitating boats ascending and descending rivers or streams. (*Communicated by Louis Roman.*)	3040	28th Oct. 1867	Victor Vicomte de Cresalles.
Construction of ships and other vessels propelled by screws.	3056	30th Oct. 1867	Thomas Edward Symonds.
Screw propellers - - - - -	3061	31st Oct. 1867	Christopher Jobson. John Jobson.
Improved apparatus for obtaining and applying motive-power - - - - - (*propelling ships.*)	3087	2nd Nov. 1867	Henry William Grylls. Henry Neville. James Holt.
Apparatus for propelling vessels - - - (*Communicated by Edouard Maitre.*)	3247	16th Nov. 1867	Henri Adrien Bonneville.
Merchants' ships and other vessels and appliances connected therewith.	3331	25th Nov. 1867	George Bell Galloway.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PROPELLING, &c.—*continued.*			
Improvements in and connected with propellers and in arrangements for propelling vessels -	3589	17th Dec. 1867	Frederick Lamb Hancock. Charles Lamb Hancock.
Improvements in means or apparatus for propelling canal boats and other vessels, parts of which improvements are applicable to other purposes. (*Communicated by Baron Oscar de Mesnil and Max Eyth.*)	3604	18th Dec. 1867	Hunter Henry Murdoch.
Construction and arrangement of plummer blocks and bearings for propeller shafts and other analogous purposes - - - - -	3654	24th Dec. 1867	William Burley. William Henry Glasson.
Improvements in motors or apparatus for generating motive-power, and in the method of applying the same to produce useful effect. (*Communicated by Benjamin Talbot Babbitt.*)	3690	28th Dec. 1867	William Edward Newton.
II.—Propelling Carriages; Locomotion on Land.			
An improved means or apparatus to be used for travelling through the atmosphere and on land and water.	473	21st Feb. 1867	Joseph Meyers Kaufmann.
Improvements in railways and in the means of propulsion used thereon. (*Communicated by Joseph Auguste Andre Fontaine.*)	549	27th Feb. 1867	Alfred Vincent Newton.
Apparatus for facilitating the starting of street or horse railroad and other carriages. (*Communicated by Samuel Ward.*)	670	8th March 1867	William Clark.
Machinery for obtaining and giving off motive-power, for the purpose of working the different kinds of machines in any mines, or for hauling, driving or drawing any kind of carriages in mines or other places.	848	23rd March 1867	Loxley Horsfield.
Improved apparatus for obtaining motive-power -	1291	3rd May 1867	Henry William Grylls. Henry Neville. Joseph William Brooks. James Holt.
Improved mechanism for the propulsion of carriages on turnpike and other like roads, by manual power.	1322	6th May 1867	Kenelm John Winslow.
An improved means or apparatus to be used for travelling through the atmosphere and on land and water, part of which apparatus is equally applicable to other purposes.	1525	22nd May 1867	Joseph Meyers Kaufmann.
Machinery or apparatus for obtaining motive-power and applying the same to vehicles on common roads and to other useful purposes.	1705	10th June 1867	James Conolly.
A novel system of constructing railways and working trains thereon, in order to enable trains to ascend inclines of steep gradient. (*Communicated by Albert Zélislas Lutowski.*)	1979	6th July 1867	William Edward Newton.
Certain improvements in "pulley and chain" gearing to be employed for lifting or traction purposes, for moving fire bars in furnaces, or for driving mechanism.	2073	15th July 1867	Thomas Wrigley.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PROPELLING, &c.—*continued.*			
Apparatus for starting, propelling and stopping railway trains or carriages, and ships or vessels.	2465	29th Aug. 1867	William Muir.
A new mode of propelling railway or other carriages	2543	9th Sept. 1867	Charles Burn.
Arrangement and construction of street sweeping and cleaning machines. (*applying driving gear.*)	2845	9th Oct. 1867	William Warren.
Improvements in the construction of railways and railway carriages, and in the means for propelling the said carriages. (*Communicated by Charles Thompson Harvey.*)	2896	15th Oct. 1867	William Robert Lake.
Improved apparatus for obtaining and applying motive-power - - - - (*propelling carriages.*)	3087	2nd Nov. 1867	Henry William Grylls. Henry Neville. James Holt.
An improved mode of and means for propelling rocking-horses, carriages and other vehicles.	3125	5th Nov. 1867	James William Rowland Hill.
An improved method of conveying rotatory motion to axles. (*moving carriages, velocipedes, &c.*)	3271	18th Nov. 1867	Kenelm John Winslow.
Improvements in apparatus for rendering innocuous the momentum of heavy bodies so as to prevent injury and damage from concussion, applicable to ships' cables, cranes, windlasses, capstans, hoists, lifts, weighing machines, ship and fort armour, to training guns, to railway trains, station buffers, fenders to pier-heads, gangways, breakwaters and other similar structures, which apparatus is also applicable for storing and accumulating power, which may be used for throwing projectiles, raising or moving heavy weights, such as ships, stranded or sunken vessels, propelling carriages and other purposes.	3302	21st Nov. 1867	William Graham McIvor.
III.—Driving Machinery, Ploughs and Pumps; Feed Motions, Guides, Adjustments and Traversers; Transmitting Power and Motion; Cranks and Gearing.			
Construction of button hole sewing-machines -	8	1st Jan. 1867	George Baldwin Woodruff. George Browning.
Machinery or apparatus for feeding paper to printing machines, and for taking off or removing and piling the same after printing - -	9	1st Jan. 1867	Alexander McGlashan. Arthur Brittlebank.
An improved mode of and machinery or apparatus for obtaining power from the motion of a ship or vessel at sea, for pumping, ventilating and other purposes. (*Communicated by Wilhelmus Johannes Van de Ven.*)	11	2nd Jan. 1867	Charles Denton Abel.
Improved apparatus for regulating, controlling and for varying the speed of shafts and machinery.	51	8th Jan. 1867	Robert Robinson.
Improvements in furnaces and in the manufacture of fire bars for the same.	75	11th Jan. 1867	Isaiah Kendrick.
Machinery for felting hat bodies - - (*Communicated by Job William Blackham.*)	97	14th Jan. 1867	George Haseltine.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PROPELLING, &c.—*continued.*			
Improvements in the means whereby tools or operating implements, instruments, appliances or parts of machinery or apparatus may be moved to and worked at various parts of articles or surfaces to be operated on by the same. (*Communicated by Norbert Belvallette.*)	105	15th Jan. 1867	Michael Henry.
Certain novel and improved combinations and arrangements of differential wheel gearing, and its application to various purposes - -	125	18th Jan. 1867	Charles Frederick Cooke. John Standfield.
An improved apparatus for raising and lowering heavy bodies. (*regulating the working.*)	159	22nd Jan. 1867	Jean Chrétien.
Certain improvements in apparatus for grinding "cards" to be employed in preparing cotton and other fibrous materials.	173	23rd Jan. 1867	Joseph Standring Dronsfield.
Improvements in sewing machinery and in the stitches to be produced by such machinery.	186	24th Jan. 1867	George Baldwin Woodruff.
Improvements in rolling and shaping metals, and in the machinery or apparatus employed therein. (*facing rims for gearing.*)	196	25th Jan. 1867	William Gray.
Wheel gearing - - - - - (*Communicated by Carl Vilhelm Schröder and Frederik Julius Jörgensen.*)	208	26th Jan. 1867	Peter Jensen.
Improved arrangements of drawing rollers used in machinery for preparing and spinning fibrous materials.	216	26th Jan. 1867	Jacob Taylor.
An improved machine for pulling flax and other similar crops. (*Communicated by Samuel Whitford Tyler.*)	228	28th Jan. 1867	George Haseltine.
An improved apparatus for transmitting power -	248	30th Jan. 1867	Thomas Charles Entwistle.
Certain improvements in setting up, arranging and actuating ships' pumps.	266	31st Jan. 1867	Henry Roberts.
Machinery for forging nails and spikes - -	271	31st Jan. 1867	David Alexander Halket.
Machinery or apparatus for preparing and combing wool, silk, cotton, flax, china grass or other fibrous substances - - - -	293	2nd Feb. 1867	John Smith. George Wilson.
Improvements in engines or machinery for boring or working rock and other material, and in stands for such engines.	296	2nd Feb. 1867	Edward Smith Crease.
Breaks and apparatus for giving motion to machinery.	299	2nd Feb. 1867	Robert David Napier.
Machines for making machine knitting needles and other needles	302	2nd Feb. 1867	Charles Pinckney Sumner Wardwell.
Improvements in or applicable to hoists or sack-tackles - - - - -	310	4th Feb. 1867	William Dewhirst. Joseph Dewhirst. Thomas Dewhirst.
Looms for weaving - - - -	314	4th Feb. 1867	Joseph John Harrison.
Improvements in machine tools for manufacturing parts of locomotive engines, parts of which improvements are also applicable to other similar or analogous purposes. (*gauge holder.*)	334	6th Feb. 1867	Stephen Alley.
Mechanical movements to be applied to automaton toys and hobby horses. (*Communicated by William Farr Goodwin and Henry Shotwell Cohu.*)	352	7th Feb. 1867	William Clark.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PROPELLING, &c.—*continued.*			
Twisting or doubling frames for yarns -	366	8th Feb. 1867	Thomas Gill.
Machinery for sizing, dressing, and beaming yarn and thread - - - - -	368	9th Feb. 1867	Richard Haworth. John Wellington Welch.
Reaping and mowing machines - -	371	9th Feb. 1867	John Brigham. Richard Bickerton.
Apparatus for obtaining and applying motive-power. (*for driving machinery.*) (*Communicated by Gerolamo Cavanna.*)	393	12th Feb. 1867	William Clark.
Machinery for cutting and polishing metals -	410	14th Feb. 1867	John Thompson.
Chain beaming apparatus - - - -	420	15th Feb. 1867	John Pinkerton Kerr. William McGee.
Improvements in and adaptation of cylinder printing machines to the double purpose of letter press and lithography, also a new mode of damping litho stones, and a new mode of registering and pointing in such machines. (*imparting reverse motion.*)	427	15th Feb. 1867	Thomas William Nicholson.
Machinery or apparatus for breaking and grinding stone, ores and other hard materials.	456	20th Feb. 1867	Thomas Archer the younger.
Applying motive-power to saw frames - -	478	21st Feb. 1867	John Robinson. John Smith.
Rag engines - - - - - -	482	22nd Feb. 1867	James Roger Crompton.
Apparatus for counterbalancing pump rods, changing the lines or angles of reciprocatory motions, and transferring power and motion from one point to another - - - - -	485	22nd Feb. 1867	William West. John Darlington.
Improvements in power loom lathes, and in take-up, feed or progressive motions for power looms and other machines - - - - -	487	22nd Feb. 1867	William Walton Urquhart. Joseph Lindsay.
Improvements in tilling and cultivating land by steam power, and in machinery or apparatus for such purposes. (*traversing guide pulleys.*)	497	23rd Feb. 1867	John Phillips-Smith.
Machinery for preparing cotton, wool and other fibrous materials for spinning.	529	26th Feb. 1867	John Tatham.
An improved steam driving wheel for imparting rotary motion to shafts.	536	27th Feb. 1867	William Stobbs.
Process and apparatus for perforating tunnels and galleries of mines of great length, through rocks, much quicker than by the process hitherto employed.	575	1st March 1867	Theophilus Berrens.
Certain improvements in apparatus for spinning and twisting cotton and other fibrous materials	627	6th March 1867	Henry Barton. Edward Whalley.
Improvements in or applicable to sewing-machines (*feed motions.*)	636	7th March 1867	Ira Dimock. James Gresham.
Steam hammers - - - - - - (*Communicated by William Sellers and Coleman Sellers.*)	644	7th March 1867	William Edward Newton.
Actuating fan blowers by steam power - - (*Communicated by George Washington Lemley.*)	646	7th March 1867	William Clark.
Sewing-machines - - - - -	658	8th March 1867	Thomas Cook.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PROPELLING, &c.—*continued.*			
Machinery for crushing stones, minerals and other like substances - - - - -	680	9th March 1867	Benjamin Walker. John Frederick Augustus Pfiaum.
Sewing-machines - - - - - -	687	11th March 1867	Alonzo Kimball.
Applying wind power for working ships' pumps -	727	13th March 1867	John Griffith.
Improvements in and apparatus for the manufacture of chloride of lime.	728	13th March 1867	Benjamin Piatt.
Construction of retorts for reburning animal charcoal.	738	14th March 1867	Paul Thomas Goodwin.
Improvements in means or apparatus for sharpening knives and other edged articles, which improvements are also applicable to grinding and polishing various surfaces.	765	16th March 1867	Richard Canham.
Mode or means of rotating brushes or other articles for which a circular or revolving motion is required.	767	16th March 1867	Stephen Holness.
Producing and applying a self-acting mechanical power for working machinery.	770	16th March 1867	Alexander James Hardy Elliot.
Sewing-machines - - - - - - (*Communicated by James Sewell M^c^Curdy.*)	792	19th March 1867	Alfred Vincent Newton.
Apparatus for driving revolving retorts and cylinders	802	20th March 1867	Paul Thomas Goodwin.
Sewing-machines - - - - - -	806	20th March 1867	Sidney Mason Tyler.
Improvements in machinery or apparatus for raising, lowering and moving heavy bodies, which improvements are also applicable for operating punching machines, screw presses, and the feed motion of circular and other saws and wood planing machines.	822	21st March 1867	James Alfred Limbert.
Machinery for manufacturing flour - - (*adjusting grindstones.*) (*Communicated by John Brown, Alexander Hart, Allen Battey Ralph, James Hobart Cutler and Dexter Neuton Knight.*)	838	22nd March 1867	George Tomlinson Bousfield.
Means or apparatus for spinning and twisting fibrous substances.	852	23rd March 1867	William Busfield.
Improvements in rotary digging machines and in teeth for the same. (*Communicated by George Granville Lobdell.*)	859	25th March 1867	George Davies.
Machinery for cutting channels in stone and for working in quarries. (*Communicated by George Jeffards Wardwell.*)	864	25th March 1867	William Edward Newton.
Improvements in machinery employed in getting coal and other minerals, and in tramways to be used therewith, also in engines to be worked by compressed air or other fluid.	886	26th March 1867	George Edmund Donisthorpe.
Machinery used in the manufacture of screw nuts and washers.	892	27th March 1867	George Richard Postlethwaite.
Certain improvements in machinery or apparatus to be employed in the preparation of cotton, wool and other similar fibrous materials.	907	28th March 1867	William Crighton.
Machinery for cutting and spreading grasses -	918	28th March 1867	James Howard. Edward Tenney Bousfield.
Sewing machinery - - - - - - (*Communicated by James Alford House and Henry Alonzo House.*)	970	1st April 1867	Alfred Vincent Newton.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PROPELLING, &c.—*continued.*			
An improved means of economizing motive-power (*see* "AXLES.") (*Communicated by Antoine Courme.*)	973	2nd April 1867	Henri Adrien Bonneville.
Sewing-machines - - - - -	1057	9th April 1867	William Newton Wilson.
An improved mode of and apparatus for multiplying power, more especially applicable to hoisting or lifting machinery. (*Communicated by Henry Josiah Griswold.*)	1077	11th April 1867	William Robert Lake.
Machinery for manufacturing bricks - - (*Communicated by Richard Alexander Douglas.*)	1078	11th April 1867	William Robert Lake.
Machinery for preparing and spinning cotton and other fibrous materials - - - - - (*regulating speed of doffer.*)	1079	11th April 1867	James Higgins. Thomas Schofield Whitworth.
Ploughs - - - - - -	1094	12th April 1867	Henry Bouthillier de Beaumont.
Machines or apparatus for printing from engraved plates, blocks, lithographic stones, or from other like printing surfaces. (*Communicated by Messieurs Krentzy, Sons, and Gedalge.*)	1116	13th April 1867	William Clark.
Machinery for actuating tools used in mining or excavating or boring, part of the improved machinery being also applicable for actuating mine or other pumps.	1123	16th April 1867	George Simpson.
Improvements in machines for winding yarn or thread on to bobbins, spools or similar surfaces, parts of which improvements are applicable to self-acting mules and like machines for spinning, doubling or twisting fibrous materials.	1128	16th April 1867	William Weild.
An improved apparatus for sweeping carpets, floors and surfaces.	1197	25th April 1867	Samuel Leake Worth.
Improvements in cutting and dressing millstones, and in apparatus to be employed for such purpose. (*Communicated by Samuel Golay.*)	1245	30th April 1867	George Davies.
Construction of sewing-machines - - -	1251	30th April 1867	Thomas Webb.
Hay and chaff cutting machines - - -	1263	1st May 1867	John Howell.
An improved combination of mechanism for operating certain parts of sewing-machines -	1286	2nd May 1867	Joseph Stuart. James Henry Smith.
Improved apparatus for obtaining motive-power -	1291	3rd May 1867	Henry William Grylls. Henry Neville. Joseph William Brooks. James Holt.
Stillages employed in packing and baling presses - (*adjustable guides.*)	1317	6th May 1867	William Bradbury.
Looms for weaving pile and other fabrics - - (*Communicated by Jean Baptiste Beau.*)	1324	6th May 1867	William Clark.
An improved combination of mechanism for communicating motion for any purpose, whereby human power can be exercised to great advantage.	1336	7th May 1867	George Harthan.
An improved nail-cutting machine - - -	1453	16th May 1867	John Sadler.
Improvements in driving sewing-machines and in apparatus employed therefor.	1462	17th May 1867	John Smith.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PROPELLING, &C.—*continued.*			
Improvements in or applicable to throstle and doubling frames and machines of like character for spinning, twisting and doubling fibrous materials.	1466	17th May 1867	George Bernhardt.
Looms for weaving hair cloth and other analogous fabrics.	1468	17th May 1867	Edward Webb.
Improvements in machinery for washing wool, the said improvements being also applicable to other purposes. (*Communicated by Jonathan Holden.*)	1477	18th May 1867	AlexanderHorace Brandon.
Machinery for folding sheets of paper or other fabric or material. (*feeding the machine.*)	1502	21st May 1867	Joseph Davies.
Arming presses for producing devices on the covers of books and other articles. (*gauges for adjusting.*)	1504	21st May 1867	John Gough.
Mining, tunnelling and stone dressing machines, and valve motion therefor. (*Communicated by Richard Channing More Lovell.*)	1566	27th May 1867	William Snell.
Machinery for weaving wool and other fibrous materials. (*Communicated by Célestin Martin.*)	1577	28th May 1867	Henri Adrien Bonneville.
Improvements in dyeing yarns and in the machinery or apparatus employed therefor.	1602	30th May 1867	Hugh Bain.
Apparatus for applying and regulating motive-power. (*see* "TOYS.") (*Communicated by Joseph de Susini.*)	1624	31st May 1867	Alexander Melville Clark.
An improved mode of and means for communicating motion to cranes, and regulating and controlling the operation of the same.	1680	7th June 1867	Alfred Barry.
Improvements in machinery or apparatus for making candles by dipping, and in the self-feeding of the tallow vessel or mould thereof.	1689	8th June 1867	John Clements Ralston.
Improvements in sewing-machines and in apparatus connected therewith - - -	1690	8th June 1867	Henry Willis. George Rice. Arthur Maxfield.
Construction of retorts for manufacturing and reburning animal charcoal. (*driving the retorts.*)	1718	11th June 1867	John Fletcher.
Sewing-machines - - - -	1761	17th June 1867	James Fletcher. William Carr.
Improvements in the manufacture of electrical telegraphic conductors and in the means or apparatus employed therein.	1772	17th June 1867	Matthew Gray.
An improvement in machinery for rubbing or dressing printers' types.	1776	17th June 1867	Patrick Welch.
Moveable spanners or screw wrenches - -	1799	20th June 1867	Thomas Wilson.
Apparatus by which the oscillations of the comb in the carding-engine, the knife in the cotton gin, and the saw in the reaping-machine or reciprocating saw, may be readily multiplied -	1809	21st June 1867	William Robertson. Charles James Waddell.
Hay-making machines - - -	1842	24th June 1867	Henry Richard John Denton.
Apparatus for transmitting power or motion - -	1847	25th June 1867	James Edward Whiting.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PROPELLING, &c.—*continued.*			
An improvement in twisting or doubling machinery for producing a certain species of yarn	1896	28th June 1867	James Holroyd. William Fieldhouse.
Improvements in machinery employed in getting coal, stone and other minerals, and in apparatus connected therewith.	1927	2nd July 1867	John Sturgeon.
Machinery for spinning and doubling	1932	3rd July 1867	John Elce. Peter Williams.
Machinery for manufacturing cordage, webbing and other like articles. (*guide.*) (*Communicated by Jesse Fewkes.*)	1933	3rd July 1867	William Robert Lake.
Improvements in machines for ruling paper, part of which improvements is also applicable to guiding paper into printing and other machines	1946	3rd July 1867	James Salmon. George William Hick.
Machinery for printing from a chain of types	1948	3rd July 1867	John McAdams.
Machines for manufacturing circular cutters and milling tools. (*imparting intermittent rotation.*)	1956	4th July 1867	Paul François Tranchat.
Improvements applicable to washing, wringing and mangling machines	1968	5th July 1867	Edward Owen Greening. Joseph Atkinson.
Machinery for manufacturing metal tubes (*guide mechanism.*) (*Communicated by Charles Granville Smith.*)	1973	5th July 1867	William Robert Lake.
Hay-making machines	2002	8th July 1867	William Andrews.
Machinery for manufacturing cards for combing or carding fibrous materials. (*Communicated by Augustus Bisco Prouty.*)	2013	9th July 1867	William Robert Lake.
Apparatus for operating the shuttles of looms for weaving narrow fabrics	2017	9th July 1867	Henry English. John Farndon.
An improved circular saw machine (*Communicated by Baxter Doddridge Whitney.*)	2030	10th July 1867	Alexander Horace Brandon.
An improved method of conveying the rotary motions to axles of steam-engines, and all machines and carriages where cranks are used.	2036	11th July 1867	Kenelm John Winslow.
Apparatus for cutting or mincing meat, vegetables and other substances. (*Communicated by David Lyman.*)	2051	12th July 1867	John Henry Johnson.
Certain improvements in "pulley and chain" gearing to be employed for lifting or traction purposes, for moving fire bars in furnaces, or for driving mechanism.	2073	15th July 1867	Thomas Wrigley.
Machinery for preparing and spinning or doubling cotton and other fibrous materials	2076	15th July 1867	John Muir Hetherington. Robert Walker Pitfield.
Ploughs	2088	16th July 1867	Thomas Pirie.
Means of communicating motion to the spindles of spinning, roving, doubling, twisting, winding and other similar machines.	2096	17th July 1867	Auguste de Smet.
An improved reciprocating motion (*Communicated by John Berry Page.*)	2155	24th July 1867	Alexander Melville Clark.
Machines for spinning and doubling	2208	31st July 1867	Benjamin Dobson. James Cocker.
Certain improvements in carding-engines	2209	31st July 1867	Benjamin Dobson. William Slater.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PROPELLING, &c.—*continued.*			
Looms for weaving	2211	31st July 1867	Mary Jane Fearnley. Charles Smith.
Machinery and apparatus for cleaning and preparing fibrous substances, and for opening twisted yarns and woven fabrics.	2219	1st Aug. 1867	Francis Alton Calvert.
Forge hammers	2240	2nd Aug. 1867	William Horton.
Machinery for spinning and doubling	2244	3rd Aug. 1867	John Elce. Thomas Elce.
Machinery for reaping and mowing (*driving the reel.*)	2260	5th Aug. 1867	Adam Carlisle Bamlett.
Sewing-machines	2275	7th Aug. 1867	Emil Cornely.
Improvements in machinery or apparatus for raising or forcing water or other fluids, and for the transmission of the motive-power of water or other fluid or gases	2278	7th Aug. 1867	Francis Carr Marshall. Hugh Stewart.
Machinery for india-rubber thread cutting	2280	7th Aug. 1867	Milton Hamer.
Machinery for the manufacture of paper bags	2283	7th Aug. 1867	Joseph Pickles Binns.
Printing presses (*Communicated by Edwin Allen.*)	2290	8th Aug. 1867	William Robert Lake.
Doubling and winding machines (*Communicated by John Dollfus-Mieg.*)	2299	10th Aug. 1867	Henry Bernoulli Barlow.
Improvements in machinery for cutting grooves in knotch boards of stairs, ladder strings, uprights for louvre boards, and in other articles requiring such grooves.	2332	13th Aug. 1867	Thomas Walker.
Jacquard machinery or apparatus used in the production of figured or ornamental lace and other fabrics	2333	13th Aug. 1867	William Turney. John Ackroyd.
Machines for spinning and doubling cotton, wool and other fibrous substances	2364	17th Aug. 1867	Asa Lees. William Henry Rhodes.
Crank motions (*Communicated by Thomas Taylor.*)	2379	19th Aug. 1867	William Edward Newton.
Improved means or apparatus for hoeing, thinning or chopping out turnips or any other root crops requiring such process.	2391	21st Aug. 1867	Charles Edward Hall.
Applying motive-power to saw frames	2393	21st Aug. 1867	John Robinson. John Smith.
Certain improvements in carding-engines	2405	22nd Aug. 1867	Robert King. John Lowden. William Gartside.
An improved mode of and apparatus for hauling draining and other agricultural implements in the field, by steam power, and also an improved truck for mounting and carrying such implements from place to place.	2426	24th Aug. 1867	John Phillips-Smith.
Sewing-machines	2428	24th Aug. 1867	Martin Samuelson.
Machinery or apparatus for stitching or ornamenting and uniting fabrics.	2439	27th Aug. 1867	William Muir.
Improvements in jacquard power looms and in apparatus for driving looms.	2442	27th Aug. 1867	Erastus Brigham Bigelow.
Improvements in machinery used in cutting coal, stone, slate and other minerals, and in forming tunnels and galleries, and for other quarrying purposes.	2451	28th Aug. 1867	John Elliott.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PROPELLING, &c.—*continued.*			
Improved apparatus for propelling ships and other vessels, and for actuating machinery applicable to other purposes.	2476	31st Aug. 1867	John Armitage Brown.
Improved machinery for cutting, carving and engraving upon ivory, wood, stone, metals and other substances. (*Communicated by Isaac Hall.*)	2497	3rd Sept. 1867	Alexander Melville Clark.
Machinery for cutting grass or corn - -	2507	4th Sept. 1867	James Howard. Edward Tenney Bousfield.
Means of securing wheels, pulleys, cranks and other articles on their shafts or axles.	2515	5th Sept. 1867	John Ford.
Sewing-machines - - - -	2530	7th Sept. 1867	Thomas Cook.
Printing machinery - - - -	2537	7th Sept. 1867	David Payne.
Improvements in machinery for puddling, and in puddling and other furnaces.	2541	7th Sept. 1867	James Whitham.
Looms for weaving Scotch or ingrain carpets -	2552	9th Sept. 1867	John Marsden.
Apparatus used in the manufacture of salt - (*actuating rakes.*)	2575	11th Sept. 1867	Joseph Davies.
Improvements in tunnelling and quarrying slate and other minerals, and in machinery used for these purposes. (*traversing machine.*)	2580	11th Sept. 1867	William Fothergill Cooke.
Driving the saw-blade cutters of reaping-machines -	2582	12th Sept. 1867	Hugh Stewart.
Construction of horse rakes - - -	2583	12th Sept. 1867	James Wilderspin.
Apparatus for finishing parts of locomotive wheels -	2591	13th Sept. 1867	James Reid.
Improvements in washing rollers and blankets used by printers, and in the machinery or apparatus employed therefor.	2667	21st Sept. 1867	Thomas Muir.
Steam or other power hammers - - -	2676	23rd Sept. 1867	James Fletcher the younger.
Sewing-machines - - - -	2687	24th Sept. 1867	William Winter.
Manufacture of cranked axles, cranked shafts and other heavy forgings - - - -	2693	25th Sept. 1867	Robert Wilson. John Nuttall.
An improved combined tuck creaser and self-guide or baster, chiefly applicable to sewing-machines. (*Communicated by Henry William Fuller and Isaac William Barnum.*)	2705	25th Sept. 1867	Alexander Melville Clark.
Certain improvements in looms for weaving -	2724	27th Sept. 1867	James Edward Hyde Andrew.
Mules for spinning and doubling - - -	2747	30th Sept. 1867	Benjamin Dobson. Robert Halliwell.
Machinery for sewing boots and shoes - - (*Communicated by Augustus Destouy and Frederic Renaud.*)	2779	2nd Oct. 1867	William Robert Lake.
Machinery for the manufacture of nails and spikes - (*operating heading tools.*)	2788	3rd Oct. 1867	George Mellor.
Machinery or apparatus employed in the manufacture of braid. (*thread guides.*) (*Communicated by George Rehfuss.*)	2799	4th Oct. 1867	John Henry Johnson.
An improved apparatus to be used in excavating -	2826	8th Oct. 1867	John Bostock Hulme.
Mounting and driving millstones - -	2842	9th Oct. 1867	Richard Smith.
Sewing-machines - - - - - (*Communicated by François Jean Baptiste Victor Brosser and Charles Edward Brosser.*)	2867	12th Oct. 1867	Henry Bernoulli Barlow.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PROPELLING, &c.—*continued.*			
Improvements in revolving batteries and in the means for working the same. (*Communicated by James Buchanan Eads.*)	2888	14th Oct. 1867	William Robert Lake.
Sewing-machines - - - - - -	2895	15th Oct. 1867	Martin Samuelson.
Machinery for preparing and spinning cotton or other fibrous substances.	2947	19th Oct. 1867	Ellis Butterworth.
Power looms - - - - -	2951	21st Oct. 1867	Michael Barker Nairn.
Construction of sewing-machines - -	2962	22nd Oct. 1867	Thomas Webb.
An improved method of treating hides in the process of tanning, and for apparatus employed therein. (*Communicated by Moritz Michaelis, Isaac Hallenstein and Arthur Cleghorn.*)	2973	22nd Oct. 1867	William Brookes.
Machinery for the manufacture of files - - (*actuating feed motion.*)	2982	24th Oct. 1867	Aaron Chambers.
Apparatus for transmitting and multiplying motive-power. (*Communicated by François Jobard.*)	2995	24th Oct. 1867	Alexander Melville Clark.
Improvements in machines for printing from copper, steel and other metal plates, applicable also for printing from lithographic stones - - (*guides.*)	3034	28th Oct. 1867	Alfred James Waterlow. Walter Blandford Waterlow. Sydney Hedley Waterlow.
Machines for twisting lines, cords, ropes and cables, and hanking and coiling the same. (*guides.*) (*Communicated by Chauncey Orrin Crosby.*)	3045	29th Oct. 1867	Edward Thomas Hughes.
Improvements in transmitting motive-power and in mechanism or apparatus employed therefor -	3066	31st Oct. 1867	James Tennant Caird. Stewart Robertson.
Improvements in machinery employed in getting coal, stone and other minerals, and in apparatus connected therewith.	3076	1st Nov. 1867	John Sturgeon.
Power looms - - - - -	3081	2nd Nov. 1867	John Wright. Michael Barker Nairn.
Improved apparatus for obtaining and applying motive-power - - - - - (*driving machinery.*)	3087	2nd Nov. 1867	Henry William Grylls. Henry Neville. James Holt.
Improvements in doubling, folding or plaiting woven or other web fabrics, and in the machinery or apparatus employed therein or connected therewith. (*traversing the cloth.*)	3093	4th Nov. 1867	James Orr.
Certain improvements in mules for spinning, doubling or twining cotton or other fibrous substances.	3101	4th Nov. 1867	Herbert Hebden.
Sewing-machines - - - - (*Communicated by John Squire Andrews.*)	3106	4th Nov. 1867	Alfred Vincent Newton.
Machinery for polishing cylinders - -	3126	6th Nov. 1867	Robert Leake. Joseph Beckett.
Looms for weaving - - - -	3152	8th Nov. 1867	Thomas Blackburn.
Apparatus for regulating or adjusting the position of endless travelling webs or bands employed in various kinds of machinery.	3153	8th Nov. 1867	Charles Anderson.
Machinery for setting types - - - - (*Communicated by Joseph Thorne.*)	3164	8th Nov. 1867	George Tomlinson Bousfield.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PROPELLING, &c.—*continued.*			
Machines for pressing or moulding bricks, tiles or other blocks. (*Communicated by John North.*)	3196	12th Nov. 1867	Henri Adrien Bonneville.
Rotary spaders or digging machines for tilling land.	3199	12th Nov. 1867	John Thomas Brown Porter.
Improvements in rotary engines applicable as motors, pumps, meters and for other purposes, also in indicators applicable to such and other engines or meters and other purposes. (*Communicated by Arthur Emery Perry.*)	3219	13th Nov. 1867	Alfred Vincent Newton.
New and useful machinery for making, drying and burning bricks and tiles, applicable in part to baking pottery ware.	3220	13th Nov. 1867	Peter Edward Bland.
Machinery for the manufacture of cut nails - (*Communicated by Cyrus Dexter Hunt.*)	3246	15th Nov. 1867	Richard Heathfield.
Machinery for twisting yarns of two or more colours and kinds, commonly called "French twist" or "knotted yarn" - - -	3268	18th Nov. 1867	John Varley Thornton. Charles Abercrombie.
An improved method of conveying rotatory motion to axles.	3271	18th Nov. 1867	Kenelm John Winslow.
Improvements in the method of sewing sheets of paper, forming books and pamphlets, and in machinery for effecting the same - -	3306	22nd Nov. 1867	Robert Leighton. Thomas Kirkham.
An improved method of transmitting motive-power to potters' wheels, lathes, jiggers, and other similar machinery for the manufacture of pottery and other articles made from clay.	3319	23rd Nov. 1867	William Boulton.
Machinery for ruling ornamental patterns or devices - - - - -	3322	23rd Nov. 1867	Samuel Amphlet. Joseph Beverley Fenby.
Improvements in machinery for cutting or dressing stone and in apparatus connected therewith.	3354	27th Nov. 1867	Charles Coates.
Machinery or apparatus employed in the preparation of wool or other fibrous substances, technically known as condensers - - - (*producing traverse motion.*)	3371	28th Nov. 1867	Thomas Carter. Benjamin Carter. John Lisle.
Machinery or apparatus for cutting woollen and cotton corduroy or other similar fabrics.	3372	28th Nov. 1867	William Cotton.
Improvements in machinery for boring rocks, and in apparatus for driving rock-boring, tunnelling, coal-cutting and other machinery employed in mines, collieries and quarries - - -	3386	29th Nov. 1867	Thomas Brown Jordan. John Darlington.
Reaping and mowing machines - -	3441	3rd Dec. 1867	Richard Hornsby. James Edwin Phillips.
Apparatus for cleaning or decorticating cotton seed and other grains or seeds.	3443	3rd Dec. 1867	Nathaniel Grew.
Apparatus for driving straw elevators - -	3477	6th Dec. 1867	Francis Roper.
Excavating machines more especially designed for making ditches and drains. (*Communicated by Henry Charles Ingraham.*)	3500	9th Dec. 1867	William Robert Lake.
Hay-making machines, horse hoes, horse rakes and other analogous agricultural implements or machines.	3538	12th Dec. 1867	Robert Boby.
Apparatus to be applied to looms for weaving -	3547	13th Dec. 1867	William McIlwraith. Joseph Bonner.
Bench planes and moulding tools - - (*Communicated by Nelson Palmer.*)	3552	13th Dec. 1867	William Edward Newton.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PROPELLING, &c.—*continued.*			
Improvements in breaks for railway and other carriages, and in signalling and other apparatus in connection therewith, which improvements are also partly applicable to other purposes. (*applying power to winch handles.*)	3597	18th Dec. 1867	Thomas Comfield the younger.
Machinery for cutting and heading nails -	3651	23rd Dec. 1867	Matthew James Rice.
Thread-polishing machines - - -	3710	31st Dec. 1867	Gilbert M^{c}Culloch.
Road-sweeping machines - - - (*Communicated by Jean Tailfer and Charles Léon Blot.*)	3720	31st Dec. 1867	Alexander Melville Clark.
For Driving-bands, *see* "STRAPS." For adjusting Fire-arms, *see* "FIRE-ARMS."			
PUMPS; PUMPING AND RAISING WATER AND OTHER LIQUIDS; PUMP PISTONS AND PACKINGS; SHIPS' PUMPS; TURBINES; BEER ENGINES.			
An improved mode of and machinery or apparatus for obtaining power from the motion of a ship or vessel at sea, for pumping, ventilating and other purposes. (*Communicated by Wilhelmus Johannes Van de Ven.*)	11	2nd Jan. 1867	Charles Denton Abel.
Mode of raising brine in or from boreholes of great depth.	48	7th Jan. 1867	Carl Friedrich Claus.
Improvements in the means of and apparatus for lighting railway carriages, parts of which improvements are also applicable for other purposes. (*applicable to pumps.*)	58	9th Jan. 1867	William Thomas Sugg.
A new or improved differential pump for pumping and discharging varying quantities of liquid, and producing varying pressure. (*Communicated by Pierre du Rieux and Edouard Roettger.*)	69	11th Jan. 1867	Edward Thomas Hughes.
Certain improvements in setting up, arranging and actuating ships' pumps.	266	31st Jan. 1867	Henry Roberts.
An improved mode of raising water by atmospheric pressure, and apparatus connected therewith -	274	1st Feb. 1867	Thomas Cooke, sen^{r}. Charles Frederick Cooke.
Apparatus for obtaining and applying motive-power. (*for raising water.*) (*Communicated by Gerolamo Cavanna.*)	393	12th Feb. 1867	William Clark.
Machinery for obtaining and applying motive-power. (*Communicated by Gustav Odemar.*)	472	21st Feb. 1867	Edward Griffith Brewer.
Improvements in propelling vessels, which improvements are also applicable to raising or forcing fluids.	479	21st Feb. 1867	William Hale.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PUMPS, &c.—*continued.*			
Apparatus for counterbalancing pump rods, changing the lines or angles of reciprocatory motions, and transferring power and motion from one point to another - - -	485	22nd Feb. 1867	William West. John Darlington.
Motive-power engines to be worked by water, steam or other fluid, and applicable to pumps.	498	23rd Feb. 1867	Henry Purnell.
An improved packing for piston rods, pump rods and valve spindles.	543	27th Feb. 1867	John McLintock.
Improvements in self-acting steam and fluid safety gauges, the said improvements being applicable to cocks or taps and valves. (*pump valves.*)	591	2nd March 1867	John Ambrose Coffey.
Manufacture of packing for the joints of steam engines, pumps and for other purposes. (*Communicated by Morris Botticher.*)	613	5th March 1867	George Haseltine.
Steam-engines and pumps - - - (*Communicated by Hart Foster Pease.*)	621	6th March 1867	John Garrett Tongue.
Hydraulic motors - - - - -	641	7th March 1867	Paul Rapsey Hodge.
Apparatus for raising, forcing, propelling and exhausting fluids and gases.	686	11th March 1867	William Bryer Nation.
Improvements in propulsion and in rotary apparatus for giving motion or energy to fluids and receiving motion or energy from them. (*lifting or driving water.*)	696	11th March 1867	Matthew Piers Watt Boulton.
Machinery and apparatus for moving mud, sewage, sand, small gravel or other similar matter, from one place to another. (*Communicated by James Burt.*)	702	12th March 1867	Thomas Burt.
Method of and apparatus for supplying beer and similar beverages to the purchaser or consumer. (*Communicated by Henry Giraldon.*)	724	13th March 1867	Michael Henry.
Applying wind power for working ships' pumps -	727	13th March 1867	John Griffith.
Rotary engines and pumps - - - (*Communicated by Dexter Davis Hardy.*)	755	15th March 1867	William Robert Lake.
Improvements in steam fire-engines and boilers, such improvements being applicable to other purposes.	772	16th March 1867	James Shand.
Rotary pump for raising or forcing fluids -	833	22nd March 1867	John Hathornthwaite Winder.
An improved means of draining mines, coal pits and other places from whence it is desired to raise water.	860	25th March 1867	William Matthews.
Improvements in apparatus for receiving motion or energy from fluids and for imparting it to them, and in the propulsion of vessels, and apparatus to be used for that purpose.	915	28th March 1867	Matthew Piers Watt Boulton.
Machinery or apparatus for obtaining and applying motive-power. (*as a pump.*)	984	2nd April 1867	Jean Albert Moll.
Improvements in apparatus to be used for towing ships or vessels, and in apparatus for laying submarine telegraph cables. (*or pumping up sea water.*)	1015	4th April 1867	James Maze Kilner.
An improved combined lift and force pump -	1026	5th April 1867	Stephen Matthews.
Pumps - - - - - - -	1027	5th April 1867	William Adair.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PUMPS, &c.—*continued.*			
An improved combined water-meter and force-pump (*Communicated by Elihu Spencer and Thomas Stephens.*)	1045	6th April 1867	William Robert Lake.
Machinery or apparatus for maintaining and augmenting motive-power.	1059	9th April 1867	Hugh Forbes.
Construction of valves and valve cocks - - (*for pumps.*)	1102	13th April 1867	John Shore.
Machinery for actuating tools used in mining or excavating or boring, part of the improved machinery being also applicable for actuating mine or other pumps.	1123	16th April 1867	George Simpson.
Construction of blowing and pumping engines - (*Communicated by Philander Higley Roots.*)	1181	23rd April 1867	Alfred Vincent Newton.
Construction of buckets for air and other pumps -	1235	29th April 1867	Jacob Bird.
Improvements in beer engines, which improvements are also applicable to pumps for various purposes.	1297	3rd May 1867	John Holmes.
Construction of turbines and other hydraulic engines or apparatus for obtaining motive-power, and for measuring the flow of fluids - -	1300	3rd May 1867	John Ramsbottom. Thomas Massey Pearce.
Improvements in meters for measuring the flow of water and other fluids, which improvements are applicable also in the construction of pumps for air, water and other fluids. (*Communicated by Heinrich Wilhelm Schneider.*)	1303	3rd May 1867	Charles Bosch Reitz.
An improved mode of lubricating the stuffing boxes of steam-engines aud pumps, and of rendering the packing for such or other machines or apparatus waterproof and more durable than heretofore. (*Communicated by Abraham Littlewood, Francis W. Bloodgood and Henry Dirks Ostermoor.*)	1378	9th May 1867	William Edward Newton.
Rotary engines - - - - - (*Communicated by Freidrich August Vogelsang.*)	1383	10th May 1867	Frederick Bernard Dœring.
Improvements in the means of raising liquids and in apparatus for the same. (*Communicated by Pierre Léon Margot, jun^{r}.*)	1427	14th May 1867	Alexander Melville Clark.
Beer and other like engines - - - (*Communicated by Monsieur Celestin Rahon.*)	1490	20th May 1867	Hector Auguste Dufrené.
Rotatory engines and pumps - - -	1529	22nd May 1867	Ebenezer William Hughes. Thomas Howard Head.
Improvements in apparatus for measuring fluids, which improvements are also applicable for obtaining motive-power and for pumping - -	1561	27th May 1867	Herbert Frost, senior. Herbert Frost, junior.
Rotary pumps - - - - -	1671	7th June 1867	Augustus Lea Bricknell.
Apparatus for and modes of revivifying malt liquors and other beverages, and for warming them.	1698	10th June 1867	James Crompton.
Rotary engines and pumps - - -	1791	19th June 1867	Ebenezer William Hughes. Thomas Howard Head.
Improvements in buckets for pumps, especially suitable for pumps for mines, and in pistons for steam and other engines.	1821	21st June 1867	Francis Reddicliffe.
Construction of motive-power engines and pumps -	1822	21st June 1867	Emory M^{c}Clintock.
Improvements in double-action pumps and in the methods of operating pumps, part of which improvements are applicable to other reciprocating machines.	1827	22nd June 1867	Stephen Holman.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PUMPS, &c.—*continued.*			
Machinery or apparatus for raising and forcing water and other fluids - - - -	1828	22nd June 1867	Thomas Wilson. William Hall.
Apparatus for transmitting power or motion - (*applicable to pumps.*)	1847	25th June 1867	James Edward Whiting.
An economical system of raising running waters with apparatuses fixed or carried on boats, and without dams or steam-engines, but by the simple use of the force produced by the current of a river or watercourse. (*Communicated by Alphonse Lalauze.*)	1868	27th June 1867	William Edward Gedge.
An improved sucking and forcing hydropneumatic pump with no piston.	1898	29th June 1867	Paul Zaroubine.
Rotary engines and rotary pumps - - -	1984	6th July 1867	William Archer.
Pumps - - - - - -	2022	10th July 1867	Frederick Holmes.
Apparatus for drawing or raising beer and other malt or spirituous liquors to a higher level than that of the cask or other vessel in which they are kept. (*see* "AIR-SUPPLYING.")	2081	15th July 1867	James Fleming.
Rotary pumps for raising water or other liquids -	2246	3rd Aug. 1867	Richard Bewley, junior.
Apparatus for propelling vessels and pumping or raising water.	2254	3rd Aug. 1867	Walter Watson Hughes.
Improvements in machinery or apparatus for raising or forcing water or other fluids, and for the transmission of the motive-power of water, steam or other fluid or gases - - -	2278	7th Aug. 1867	Francis Carr Marshall. Hugh Stewart.
Apparatus for obtaining motive-power and for raising and forcing water and fluids.	2289	8th Aug. 1867	Johann Ernst Friedrich Lüdeke.
Improvements in utilizing certain waste materials and in manufacturing packing therefrom.	2326	13th Aug. 1867	Silvester Rait Wybrants.
Improved apparatus for pumping fluids - -	2334	14th Aug. 1867	William Bradshaw Leachman. John Holroyd.
Apparatus for raising water or other liquids by steam power. (*Communicated by William Lewis Horne.*)	2408	22nd Aug. 1867	Alexander Melville Clark.
Improvements in apparatus for raising, supplying and measuring water to steam-boilers, part of which invention is also applicable to measuring water for other purposes.	2422	23rd Aug. 1867	John Varley.
An improved rotary steam or gas engine, also applicable for pumping and measuring liquids.	2536	7th Sept. 1867	Emile Hubner.
Apparatus for producing artificial ice, parts of such apparatus being also applicable to other purposes.	2544	9th Sept. 1867	Edward John Cowling Welch.
Construction of rotary pumps - - -	2686	24th Sept. 1867	Hugh Forbes.
Pumps - - - - - -	2716	26th Sept. 1867	George Wilkinson.
Machinery for raising water - - - - (*Communicated by Robert Brunton.*)	2718	26th Sept. 1867	John Brunton.
An improved combined lift and force pump - (*Communicated by Stephen Matthews.*)	2809	5th Oct. 1867	Luke Williams.
Means or machinery for working or actuating the slide valves of steam pumps and blowing engines - - - - -	2854	11th Oct. 1867	John Withinshaw, John Edward Baker.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PUMPS, &c.—*continued.*			
Improvements in sinking or forming wells, and in apparatus to be used for this and similar purposes. (*Partly communicated by Stephen Brewer.*)	2981	23rd Oct. 1867	James Lee Norton.
Improvements applicable to ships' and other pumps - - - - -	3027	28th Oct. 1867	William Payne. Alexander Black Fraser.
Construction of pumps - - - -	3062	31st Oct. 1867	Robert Clegg.
Clack and bucket door pieces for pumps - -	3179	11th Nov. 1867	William Payne.
Improvements in rotary engines applicable as motors, pumps, meters and for other purposes, also in indicators applicable to such and other engines or meters and other purposes. (*Communicated by Arthur Perry Emery.*)	3219	13th Nov. 1867	Alfred Vincent Newton.
Improved apparatus for raising water - -	3228	14th Nov. 1867	Levi Alfred Wainman.
Improvements in steam and other motive-power engines and in valves for engines - - (*pumping engines.*)	3299	21st Nov. 1867	William Robert Green. John George Freeman.
Rotary engines and pumps - - -	3304	21st Nov. 1867	Ebenezer William Hughes.
Improvements in machinery for boring rocks, and in apparatus for driving rock boring, tunnelling, coal cutting and other machinery employed in mines, collieries and quarries - - - (*a motive cylinder or pump.*)	3386	29th Nov. 1867	Thomas Brown Jordan. John Darlington.
Construction of hand garden engines and hydropults.	3423	2nd Dec. 1867	Robert William Page.
Improvements in steam winches, which are also applicable to other similar purposes. (*applicable to pumps.*) (*Communicated by Joseph Corradi.*)	3425	2nd Dec. 1867	George Breen.
Improvements applicable to waterclosets and pumps connected therewith, which latter improvements are applicable to lift-pumps generally.	3430	3rd Dec. 1867	John Hays Wilson.
Improvements in elastic packings for the pistons of steam-engines and for other purposes, and in the machinery employed in the manufacture of such packings. (*for pumps.*)	3495	9th Dec. 1867	Edward Keirby.
Steam pumps - - - - -	3531	12th Dec. 1867	Ephraim Death.
Improvements in sinking tubes or cylinders for obtaining and raising water, and in the apparatus for effecting the same.	3572	16th Dec. 1867	James Eglinton Anderson Gwynne.
Method of and apparatus for raising water - - (*Communicated by Jan Barend Hendrik Van Royen.*)	3590	17th Dec. 1867	William Armand Gilbee.
Improvements in breaks for railway and other carriages, and in signalling and other apparatus in connection therewith, which improvements are also partly applicable to other purposes. (*to well bucket raising.*)	3597	18th Dec. 1867	Thomas Comfield the younger.
Direct acting double action steam pumps - -	3630	21st Dec. 1867	William Walker. Edward Holt.
Improvements in motive-power engines, part of which improvements are applicable to the arrangement and construction of pumps for raising and forcing liquids, fluids and other substances generally.	3656	24th Dec. 1867	Christopher Pottinger.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
PUMPS, &c.—*continued.*			
Metallic pistons for steam cylinders, air cylinders or pumps.	3685	28th Dec. 1867	Jacob Goodfellow.
PURSES AND FASTENINGS.			
Improvements in the manufacture of boots and shoes, and in machinery or apparatus therefor, which improvements are also equally applicable to the manufacture of portemonnaies, travelling bags, parts of harness, and in fact to almost all such manufactures as require fixing, basting, cementing, sewing or stitching. (*Communicated by Jules Constant Touzet.*)	206	26th Jan. 1867	Bristow Hunt.
Improvements in fastenings applicable to boots and shoes, gaiters, gloves, books, portemonnaies and other articles.	256	30th Jan. 1867	Saxon Macarthy.
Portemonnaies, portfolios, pocket-books, cigar-cases and other similar articles.	510	25th Feb. 1867	Gustav Lüttringhaus.
A new or improved elastic clasp or lock suitable for pocket-books, purses, wallets or any kind of leather cases.	2197	30th July 1867	Abel Holloway.
Purses and other like articles - - - (*Communicated by Franz Weintraud.*)	2574	11th Sept. 1867	Fritz Weintraud.
Tobacco pouches, purses, cigar cases, and bags of various kinds.	3197	12th Nov. 1867	Raoul Paul Faucheux.
RAGS AND WASTE; SEPARATING FIBRES FROM FABRICS.			
Manufacture of jacquard tapestry, and plain and printed terry and cut pile carpets, by the application of materials not hitherto used in such manufacture. (*woollen cuttings or rags.*)	53	8th Jan. 1867	William Wood.
Treating and preparing silk - - - (*silk waste.*) (*Communicated by Adolphe Philippe and Gustave Fortier.*)	264	31st Jan. 1867	Clinton Edgcumbe Brooman.
Machinery for scutching flax or other fibrous materials, and also for opening and straightening fibrous materials (which have been previously made up into yarns and threads), in order to prepare the same for spinning and other purposes.	450	19th Feb. 1867	Edward Brasier.
Rag engines - - - - -	482	22nd Feb. 1867	James Roger Crompton.
Machines for "grinding" or tearing up rags and other fibrous substances.	714	12th March 1867	William Wood.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
Rags, &c.—*continued.*			
Process of and apparatus for cleaning waste and other substances, and preventing the adhesion of sediment in steam-boilers and pipes.	**774**	18th March 1867	John Smith.
Engines and machines for washing, beating, grinding or reducing rags and other fibrous substances into paper pulp, and into fibres for yarns or cloth.	**914**	28th March 1867	William Wood.
Preparation of fibre from rags or other semi-waste substances wholly or partly of wool or animal fibre, for the manufacture of yarns.	**934**	29th March 1867	William Wood.
Improvements in the preparation of explosive compounds and in making up cartridges or charges therewith. (*from rags, waste cloth, &c.*)	**989**	2nd April 1867	John Fry Reeves.
Machinery or apparatus for teazing and opening textile or fibrous materials - - -	**1019**	5th April 1867	William Tatham. William Tweedale Heap.
A new or improved process of destroying vegetable matters in wools, noils, woollen waste and rags. (*Communicated by Constant Schaller.*)	**1198**	25th April 1867	Clinton Edgcumbe Brooman.
Improvements in the treatment of fibrous materials and in apparatus to be used in such treatment. (*woollen rags.*)	**1207**	26th April 1867	John Watson Burton.
An improved method of and apparatus for extracting oil or fatty matter from cotton or woollen waste, shoddy, mungo, rags and analogous substances, by means of sulphuret of carbon.	**1897**	29th June 1867	Charles Otto Heyl.
Improvements in the manufacture of carriage bodies, and which said improvements are also applicable to the manufacture of pleasure and other boats, and other like purposes where great strength and lightness is of importance. (*from fibrous pulp.*)	**1903**	29th June 1867	Henry John Cox.
Apparatus for drying grain, seeds, malt, spent hops, brewers' and distillers' grains, hops, wool, rags and other materials.	**2071**	13th July 1867	James Lee Norton.
Improvements in producing and treating fibres from rags, and in apparatus for the same.	**2163**	25th July 1867	William Wood.
Improvements in utilizing certain waste materials and in manufacturing packing therefrom.	**2326**	13th Aug. 1867	Silvester Rait Wybrants.
Processes of extraction of the colouring matter of indigo from the waste textile fabrics which contain it. (*Communicated by Constant Bernard Paul Scheurer and Jean Baptiste Tempé.*)	**2546**	9th Sept. 1867	William Edward Gedge.
Improvements in the treatment of mixed fabrics and the extraction of wool therefrom, and in the construction of apparatus to be used for such treatment and for other purposes.	**2803**	5th Oct. 1867	George Martin.
"Rag-rolls" or "beaters" of "rag-engines," "beating-engines," or other similar machinery employed in the manufacture of paper.	**3673**	27th Dec. 1867	Jonathan Edge.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
RAILWAYS AND RAILWAY CARRIAGES.			
I.—Permanent Way, Rails, Rail-joints, Chairs and Sleepers; Portable Railways, Atmospheric Railways, Tramways.			
Improved instruments for use in packing permanent way.	83	12th Jan. 1867	Charles De Bergue.
Improvements in making and repairing highways, roads or walks, which improvements are also applicable to bedding and adjusting railway sleepers and other similar purposes.	91	14th Jan. 1867	James Reilly.
Permanent way of railways - - -	115	16th Jan. 1867	John Davies. Arthur Helwig.
An improved bolt (*for railways.*) - - - -	118	17th Jan. 1867	William Stafford. William Porter M'Callum.
Railway sleepers and chairs - - -	179	24th Jan. 1867	Leach Thornton. Edwin Thornton.
Iron channels, tramways and pavements - -	205	26th Jan. 1867	Stephen Carey.
Tramways and carriages for streets and ordinary roads.	232	29th Jan. 1867	John Haworth.
Improvements in the permanent way of railways and in screw bolts for the same, which latter are applicable to other similar purposes.	317	5th Feb. 1867	Perceval Moses Parsons.
Machinery or apparatus for opening, closing, locking and unlocking cart and other gates on railway level crossings, together with signals in connection therewith.	369	9th Feb. 1867	George Daws.
Improvements in rails for railways and in chairs for supporting the said rails - - -	506	23rd Feb. 1867	Benjamin Billingham. Abraham Griffiths. John Dudley.
Improvements in railways and in the means of propulsion used thereon. (*Communicated by Joseph Auguste Andre Fontaine.*)	549	27th Feb. 1867	Alfred Vincent Newton.
Machinery for cutting channels in stone and for working in quarries. (*rails and sleepers.*) (*Communicated by George Jeffards Wardwell.*)	864	25th March 1867	William Edward Newton.
Improvements in the permanent way of railways and in fastenings for the same.	868	26th March 1867	William Seaton.
Improvements in machinery employed in getting coal and other minerals, and in tramways to be used therewith, also in engines to be worked by compressed air or other fluid.	886	26th March 1867	George Edmund Donisthorpe.
Improvements in machinery employed in getting coal and other minerals, and in rail or tramways to be used therewith.	964	30th March 1867	James Grafton Jones.
Railways and railway engines - - -	1016	4th April 1867	Barnard Fowler. David Greig.
An improved machine for cutting scale-board, and for the manufacture of the scale-board or material cut by said machine into an improved fabric for structures generally. (*for railway tracks and sleepers.*) (*Communicated by John Kinney Mayo.*)	1051	8th April 1867	William Clark.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
RAILWAYS, &c.— *continued.*			
Improvements in the construction of railways and trucks to be employed thereon, specially for agricultural purposes.	1056	9th April 1867	Robert Alexander Rooney.
Improvements in metallic railway sleepers and in the means of fixing the rails on to the same. (*Communicated by Achille Legrand.*)	1086	12th April 1867	Henri Adrien Bonneville.
Permanent way of railways - - - (*Communicated by Robert Mudge Marchant, James Richard Davies and John Allman Marchant.*)	1170	22nd April 1867	James Ball Mannix.
Improvements in rails for tramways and in the axles of the carriages intended to run thereon.	1244	30th April 1867	George Severn.
Means of locking screw nuts - - - (*connecting rails.*) (*Communicated by Charles Bouchacourt.*)	1292	3rd May 1867	Alexander Melville Clark.
Manufacture of steel tyres, rails, axles, bridge links, shafting and other articles where uniformity in the wearing surfaces and increased durability is required.	1327	6th May 1867	George Wilson.
Improvements applicable to the permanent way of railways - - - - -	1442	15th May 1867	George Coles. James Archibald Jaques. John Americus Fanshawe.
An improvement in rails for railways - -	1511	21st May 1867	William Frederick Henderson.
Means and apparatus employed for conveying telegraphic dispatches, letters and other light articles through tubes. (*Partly communicated by Dr. Werner Siemens.*)	1532	23rd May 1867	Charles William Siemens.
An improved mode of obtaining motive-power and the apparatus employed therein. (*applicable to pneumatic message tubes.*)	1594	29th May 1867	Thomas Edmund Passee.
An improved method of securing the nuts of bolts (*used in jointing rails.*)	1780	18th June 1867	Rudolph Bodmer.
A novel system of constructing railways and working trains thereon, in order to enable trains to ascend inclines of steep gradient. (*Communicated by Albert Zelislas Lutowski.*)	1979	6th July 1867	William Edward Newton.
Construction of the permanent way of railways - (*Communicated by Gastave Natorp.*)	2038	11th July 1867	William Edward Newton.
Permanent way of railroads - - - (*Communicated by Achille Philippe Cyprien Legrand.*)	2089	16th July 1867	Henri Adrien Bonneville.
Machinery for bending, straightening and punching rods, bars and other articles of metal -	2105	18th July 1867	William Barningham. John Thompson.
An improved construction of trenail - - (*for fixing chairs to sleepers.*)	2271	16th Aug. 1867	Edward Joseph William Parnacott.
Uniting and treating iron, steel and other metals in sheets, plates, rails, bars, rods, links, bands, hoops, tubes or other formes, applicable to navigable vessels, forts, guns, bridges, roofs, floors, boilers, heaters, tanks, chests or like structures.	2376	19th Aug. 1867	William Bridges Adams.
An improved yielding fishplate employed upon railways.	2558	10th Sept. 1867	Joseph Dicken.
Apparatus for ventilating underground railways and other like structures.	2684	23rd Sept. 1867	Sanders Bevan
Locomotive engines and their permanent ways -	2755	30th Sept. 1867	John Clark.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
RAILWAYS, &c.—*continued.*			
Railway fastenings - - - - -	2771	2nd Oct. 1867	Charles James Appleby.
Improvements in the construction of railways and railway carriages, and in the means for propelling the said carriages. (*Communicated by Charles Thompson Harvey.*)	2896	15th Oct. 1867	William Robert Lake.
Improvements in locomotive engines, vehicles and appendages thereto, for better and safer working on railways, tramways and common roads.	2907	17th Oct. 1867	William Bridges Adams.
Screw bolts and nuts for securing fish plates and other objects. (*Communicated by Frederic Tudor.*)	2954	21st Oct. 1867	Charles Denton Abel.
Improvements in the permanent way of and in signalling on railways.	2955	21st Oct. 1867	John Hunter.
Machinery for excavating, raising and depositing soil. (*railway cuttings.*)	3049	29th Oct. 1867	William Peacock Savage.
Method of and apparatus for securing nuts and bolts employed on the permanent way of railways.	3054	30th Oct. 1867	John Maddocks.
Improvements in tramways or railways for streets or roads, and wheels adapted to run thereon.	3143	7th Nov. 1867	Charles Herbert Bright.
Permanent way of railways - - -	3151	7th Nov. 1867	Thomas Clark.
Certain improvements in the permanent way of railways.	3161	8th Nov. 1867	Thomas Wrigley.
Tramways for common roads - - -	3291	20th Nov. 1867	Lionel Barnet Joseph.
Manufacture of railway rails - - - -	3325	25th Nov. 1867	Milton Alexander Hamilton.
Permanent way of railways - - -	3362	27th Nov. 1867	James McFarlane. George Barker.
Construction of the permanent way of railways -	3433	3rd Dec. 1867	James Eckersley. David Martin.
Apparatus for measuring approximately the quantities of earth-work in continuous cuttings or banks such as are used in the formation of railways.	3506	10th Dec. 1867	William Henry Barlow.
Rails for railways - - - - - -	3661	24th Dec. 1867	Thomas Harbison.
Permanent way of railways - - - (*Communicated by Thomas Roberts.*)	3704	30th Dec. 1867	Alexander Melville Clark.
II.—Railway Switches, Points, Crossings and Turntables.			
Apparatus for locking the levers or handles for working railway switches and signals - -	29	4th Jan. 1867	Charles I'Anson. Alfred Kitching.
An improved construction of turntable - -	165	22nd Jan. 1867	Henry Bridgewater.
Railway crossings - - - - -	272	31st Jan. 1867	Thomas Summerson.
Improvements in the permanent way of railways and in screw bolts for the same, which latter are applicable to other similar purposes. (*crossings.*)	317	5th Feb. 1867	Perceval Moses Parsons.
Machinery for transferring engines, carriages and waggons, from one line of rails to another.	386	12th Feb. 1867	John Ramsbottom.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
RAILWAYS, &c.—*continued.*			
An improved railroad switch indicator - - (*see* "SIGNALS.") (*Communicated by Thomas Shepard Hall.*)	453	19th Feb. 1867	Alfred Vincent Newton.
Apparatus for working and governing, controlling or regulating railway signals, points and switches	538	27th Feb. 1867	John Saxby. John Stinson Farmer.
Signal and switch apparatus for railways - -	547	27th March 1867	James Livesey. John Edwards. William Jeffreys.
Improvements in signalling apparatus and in the liquid to be used therewith, and which liquid not being subject to congelation may be used as a vehicle for communicating power - - (*working railway switches.*)	730	13th March 1867	William Esplen. James John Briggs Bland.
Points and crossings of the permanent way of railways and tramways, and the provision of additional safety to the aforesaid points and crossings.	851	23rd March 1867	Charles Menzies Holland.
Mechanical contrivances and apparatus employed for locking and for actuating or setting in motion the locking and interlocking gear used or intended to be used for regulating or governing the action and movement of railway points and signals in relation to each other.	870	26th March 1867	John Saxby.
Machinery or apparatus for actuating and controlling railway points and signals.	927	29th March 1867	Walter Easterbrook.
An improvement in the manufacture of railway crossings.	1012	4th April 1867	Stanhope Perkins.
Improvements in the mechanism or apparatus employed for locking, actuating and setting in motion railway points and signals, also in the apparatus for regulating or governing the action and movement of such points and signals in relation to each other.	1221	27th April 1867	John Cariss.
An improved compound lever for working railway points and signals, applicable also to other purposes.	1579	28th May 1867	Thomas Frederick Cashin.
Improvements in stop-blocks and buffer stops to be used upon railways, part of which improvements is also applicable to the working of points on railways.	1793	19th June 1867	Henry Columbus Hurry.
Railway signals, point apparatus and lamps -	1867	27th June 1867	Joseph Grindley Rowe.
Apparatus for working railway switches and signals	1959	4th July 1867	Francis Brady.
Manufacture of crossings for the permanent ways of railways. (*Communicated by Monsieur Clerc.*)	2026	10th July 1867	William Lloyd Wise.
Mechanical contrivances and apparatus employed for locking and for actuating or setting in motion the locking and interlocking gear used or intended to be used for regulating or governing the action and movement of railway points and signals in relation to each other.	2119	20th July 1867	John Saxby.
Apparatus for preventing accidents at junctions, crossings and sidings of railways.	2123	20th July 1867	Charles Frederick Whitworth.
Machinery or apparatus for actuating, setting in motion, locking, interlocking and controlling railway points and signals.	2143	23rd July 1867	Walter Easterbrook.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
RAILWAYS, &c.—*continued.*			
Improvements in the construction of locking apparatus for governing the movement of railway points and signals, and in the mode or method of applying, combining and actuating such apparatus.	2217	31st July 1867	John Saxby.
Machinery or apparatus for actuating and locking railway points and signals.	2234	2nd Aug. 1867	John Edwards.
Point or switch indicators used on railways.	2795	4th Oct. 1867	William Smith.
Improvements in apparatus for working and governing the action of railway points and signals, a part of which is applicable for other purposes.	3128	6th Nov. 1867	Thomas Frederick Cashin.
An improved brake-washer - - - (*for rail joints, points, crossings and turntables.*) (*Communicated by Arthur Dillon-Corneck.*)	3399	30th Nov. 1867	William Edward Gedge.
Improvements applicable to the rigging, chains, windlasses, anchors and other parts of ships or vessels, or to collieries, railways, rolling stock or other purposes, to prevent sudden blows, jerks or strains. (*to crossings, switches, &c.*)	3637	21st Dec. 1867	James Davison.
III.—Railway Carriages; Coupling, Uncoupling and altering position of Carriages and Engines.			
Apparatus employed in coupling railway carriages to each other.	18	3rd Jan. 1867	William Chippindale.
An improved carriage lifting jack - - (*Communicated by Noel Victor Dominique Barbou.*)	94	14th Jan. 1867	Alexander Horace Brandon.
Wheels for carriages and other vehicles - - (*connecting with axles.*) (*Communicated by John Raddin.*)	470	21st Feb. 1867	George Haseltine.
Improvements in railway engines and carriages, and in railways applicable for the purpose of locomotion on inclines, and also for retarding and stopping such engines and carriages. (*Communicated by Pierre Ambjorn Comte de Sparre.*)	493	22nd Feb. 1867	Michael Henry.
Apparatus for facilitating the starting of street or horse railroad and other carriages. (*Communicated by Samuel Ward.*)	670	8th March 1867	William Clark.
An improved system of tank locomotive engine - (*connecting bogie carriages.*)	977	2nd April 1867	Jean Jacques Meyer. Adolphe Meyer, jun^{r}.
An improved machine for cutting scale-board, and for the manufacture of the scale-board or material cut by said machine into an improved fabric for structures generally. (*for railway cars.*) (*Communicated by John Kinney Mayo.*)	1051	8th April 1867	William Clark.
Improvements in the construction of railways and trucks to be employed thereon, specially for agricultural purposes.	1056	9th April 1867	Robert Alexander Rooney.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
RAILWAYS, &c.—*continued.*			
Apparatus for coupling railway carriages and vehicles	1110	13th April 1867	John Richardson. Charles Greenwood.
Manufacture of wagons for collieries, railways and other similar purposes	1273	2nd May 1867	James Lomax. John Lomax.
Improvements in securing and adjusting windows, blinds and shades, doors and shutters, and in the apparatus employed therefor. (*railway carriage windows.*)	1708	10th June 1867	Robert Logan.
Improvements in railway carriages and in brakes for the same. (*Communicated by Samuel Augustus Chase.*)	1764	17th June 1867	William Robert Lake.
Tenon cutting machines (*for railway carriage work.*)	1813	21st June 1867	John Powis. Jabus Stanley James.
An improved self-detaching coupling for railway carriages. (*Communicated by Ernest Von Jeinsen.*)	1879	27th June 1867	William Robert Lake.
Improvements in the manufacture of clips or spring boxes for railway and other carriages, and in machinery or apparatus to be employed therein.	2061	13th July 1867	Jacob Walker.
Railway carriages	2381	19th Aug. 1867	Clemens Reifert.
Railway and other carriages and various parts of the same.	2796	4th Oct. 1867	Joseph Offord.
Pneumatic springs specially applicable to railway rolling stock. (*Communicated by Joseph Dauley.*)	2810	5th Oct. 1867	John Piddington.
Improvements in mattresses, sofas, couches, ottomans, easy chairs, railway carriage seats and other such like or similar articles	2834	8th Oct. 1867	Robert Reid. Edward Horne Craigie.
Improvements in the construction of railways and railway carriages, and in the means for propelling the said carriages. (*Communicated by Charles Thompson Harvey.*)	2896	15th Oct. 1867	William Robert Lake.
Improvements in locomotive engines, vehicles and appendages thereto, for better and safer working on railways, tramways and common roads.	2907	17th Oct. 1867	William Bridges Adams.
Chairs for the use of dentists, barbers, photographers or other persons, such invention also being applicable to other useful purposes.	2915	17th Oct. 1867	Otis Converse White.
Improvements applicable to carriages for tramways or railways for streets or roads.	3144	7th Nov. 1867	Charles Herbert Bright.
Apparatus employed in coupling railway carriages	3163	8th Nov. 1867	William Chippindale.
Improvements in omnibuses and similar vehicles, and in apparatus in connection therewith, part of which improvements are also applicable to railway and other carriages.	3178	11th Nov. 1867	William Thompson.
Certain improvements in the construction of waggons and other carriages employed on railways or tramways	3261	18th Nov. 1867	Law Brierley. Walter Brierley. John Bonnell.
Improvements in means of communication applied to railway carriages, and in apparatus for making signals, which improvements are in part applicable to other purposes.	3284	20th Nov. 1867	Hugh Hughes Lloyd.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
RAILWAYS, &C.—*continued.*			
Improvements in apparatus for rendering innocuous the momentum of heavy bodies so as to prevent injury and damage from concussion, applicable to ships' cables, cranes, windlasses, capstans, hoists, lifts, weighing machines, ship and fort armour, to training guns, to railway trains, station buffers, fenders to pier-heads, gangways, breakwaters and other similar structures, which apparatus is also applicable for storing and accumulating power, which may be used for throwing projectiles, raising or moving heavy weights, such as ships, stranded or sunken vessels, propelling carriages and other purposes.	3302	21st Nov. 1867	William Graham McIvor.
Certain new and useful improvements in the running mechanism of car and carriage trucks of any nature.	3363	27th Nov. 1867	Samuel Augustus Chase.
Improved means of connecting and disconnecting locomotive engines and railway carriages and other vehicles. (*Communicated by Louis Joseph Lecocq.*)	3398	30th Nov. 1867	William Edward Gedge.
An improved brake-washer - - - (*for carriages.*) (*Communicated by Arthur Dillion-Corneck.*)	3399	30th Nov. 1867	William Edward Gedge.
Couplings for railway wagons - - -	3407	30th Nov. 1867	Robert Fletcher Compton.
An improvement in the construction of easy chairs, settees, sofas, seats for railway and other carriages, and invalid hospital couches or carriages - - - - - -	3412	2nd Dec. 1867	Thomas Finer Widenham. John Reynolds.
Couplings for railway trucks - - -	3478	6th Dec. 1867	Jabez Evans.
Construction of and mode or modes of connecting and working railway carriages or trains - -	3629	21st Dec. 1867	Charles de Bergue. William Dredge.
Improvements in machinery for pressing cotton and for crushing and pressing other substances, the said machinery being adaptable for locomotion on railways or on common roads.	3635	21st Dec. 1867	Charles George Wilson.
Improvements applicable to the rigging, chains, windlasses, anchors and other parts of ships or vessels, or to collieries, railways, rolling stock or other purposes, to prevent sudden blows, jerks or strains.	3637	21st Dec. 1867	James Davison.
Carriages, railway trucks and other vehicles -	3692	28th Dec. 1867	Richard Howarth.
See also "WHEELS FOR CARRIAGES." *See also* "AXLES." For Ventilating Railway Carriages, *see* "VENTILATION. For Lighting Railway Carriages, *see* "LAMPS."			
IV.—Railway Buffers and Breaks; Retarding and Stopping Trains; Preventing Collisions, &c.			
Breaks and apparatus for giving motion to machinery.	299	2nd Feb. 1867	Robert David Napier.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
RAILWAYS, &c.— *continued.*			
Improvements in railway engines and carriages, and in railways applicable for the purpose of locomotion on inclines, and also for retarding and stopping such engines and carriages. (*Communicated by Pierre Ambjorn Comte de Sparre.*)	493	22nd Feb. 1867	Michael Henry.
Improvements in signalling on railways and in apparatus connected therewith. (*and stopping the engine.*)	518	26th Feb. 1867	George Daws.
Buffing springs and parts connected therewith -	704	12th March 1867	Henry Lee Corlett.
Apparatus for stopping or retarding railway trains -	807	20th March 1867	Gilbert Amable Laurent.
A new and improved railway brake - - - (*Communicated by Eugène Hippolyte Duru.*)	975	2nd April 1867	Henri Adrien Bonneville.
Arrangement of railway brakes - - -	1111	13th April 1867	Alfred Andrew Langley.
An improvement in the construction of buffers -	1328	6th May 1867	George Wilson.
An improved railway break - - -	1338	7th May 1867	Robert Marsden. Urius Bromley.
Springs for buffers and bearings and for other purposes.	1369	9th May 1867	Thomas Aldridge Weston.
Improvements in machinery or apparatus for communicating between passengers in railway carriages and the guard and driver of railway trains, and improved self-acting breaks applicable also to other carriages or vehicles.	1379	9th May 1867	Ratcliffe Andrew.
Improvements in railway breaks and in the means of applying the same.	1420	13th May 1867	John Clark.
Railway buffers - - - - -	1543	24th May 1867	Clement Martin. James Grint.
Improvements in railway carriages and in brakes for the same. (*Communicated by Samuel Augustus Chase.*)	1764	17th June 1867	William Robert Lake.
Improvements in stop-blocks and buffer stops to be used upon railways, part of which improvements is also applicable to the working of points on railways.	1793	19th June 1867	Henry Columbus Hurry.
Railway buffers - - - -	1794	19th June 1867	Walter MacLellan.
Apparatus for starting, propelling, and stopping railway trains or carriages, and ships or vessels -	2465	29th Aug. 1867	William Muir.
Brakes for railway trains, parts of which can be used or applied for signalling on trains in motion.	2483	2nd Sept. 1867	Richard Watson.
An improved construction of railway buffer - -	2519	5th Sept. 1867	James Baird Handyside.
A new and improved railway brake - - (*Communicated by Leleux Bernard.*)	2598	14th Sept. 1867	Henri Adrien Bonneville.
Method of and materials for manufacturing ammunition boxes, pontoons, baggage and other waggons and carriages, and various equipments for military, naval and civil purposes. (*blocks for buffer springs.*)	2630	19th Sept. 1867	Thomas Charles Clarkson
Pneumatic springs specially applicable to railway rolling stock. (*Communicated by Joseph Dauley.*)	2810	5th Oct. 1867	John Piddington.
Improvements applicable to railway trains for the prevention of accidents arising from collisions or other casualties on railways.	2884	14th Oct. 1867	Matthew Fitzpatrick.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
RAILWAYS, &c.—*continued.*			
Apparatus for transmitting alarm signals and applying brake power in railway trains. (*Communicated by Jean Baptiste Jolly.*)	2889	14th Oct. 1867	Marc Antoine François Mennons.
Improvements in the construction of railways and railway carriages, and in the means for propelling the said carriages. (*checking motion of propelling cables.*) (*Communicated by Charles Thompson Harvey.*)	2896	15th Oct. 1867	William Robert Lake.
Improvements in locomotive engines, vehicles and appendages thereto, for better and safer working on railways, tramways and common roads.	2907	17th Oct. 1867	William Bridges Adams.
Apparatus for compressing air and for working pneumatic railways.	2978	23rd Oct. 1867	Frederic Seiler.
Buffers and draw springs for railway carriages -	2992	24th Oct. 1867	Joseph Mitchell.
Railway and other brakes - - - (*Communicated by Martin Henri Rumpf.*)	3026	26th Oct. 1867	Alexander Melville Clark.
Railway and other brakes - - - (*Communicated by Désiré Parfait Lefèvre and Louis Philippe Dorré.*)	3119	5th Nov. 1867	Alexander Melville Clark.
A method of attenuating the effect of shocks or concussions between engines, carriages or waggons composing a railway train.	3223	14th Nov. 1867	Paul de Bavay.
Improvements in apparatus for rendering innocuous the momentum of heavy bodies so as to prevent injury and damage from concussion, applicable to ships' cables, cranes, windlasses, capstans, hoists, lifts, weighing machines, ship and fort armour, to training guns, to railway trains, station buffers, fenders to pier-heads, gang-ways, breakwaters and other similar structures, which apparatus is also applicable for storing and accumulating power, which may be used for throwing projectiles, raising or moving heavy weights, such as ships, stranded or sunken vessels, propelling carriages and other purposes.	3302	21st Nov. 1867	William Graham McIvor.
Improvements in breaks for railway and other carriages, and in signalling and other apparatus in connection therewith, which improvements are also partly applicable to other purposes.	3597	18th Dec. 1867	Thomas Comfield the younger.
Improvements applicable to the rigging, chains, windlasses, anchors and other parts of ships or vessels, or to collieries, railways, rolling stock or other purposes, to prevent sudden blows, jerks or strains.	3637	21st Dec. 1867	James Davison.
An improved railway carriage break - -	3658	24th Dec. 1867	Pierre Demeure.
Certain improvements in railway breaks -	3676	27th Dec. 1867	Joseph Cockshoot, jun^{r}. Henry Weatherill.
Brakes applicable to carriages and other vehicles -	3718	31st Dec. 1867	Archibald Allan.

See also "SIGNALS."

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
REAPING, MOWING, MAKING HAY.			
Reaping and mowing machines	107	15th Jan. 1867	Austin Hill.
An improved machine for pulling flax and other similar crops. (*Communicated by Samuel Whitford Tyler.*)	228	28th Jan. 1867	George Haseltine.
Reaping and mowing machines	371	9th Feb. 1867	John Brigham. Richard Bickerton.
Apparatus employed in mowing and reaping	588	2nd March 1867	George Mingay Garrard.
Machinery for cutting and spreading grasses	918	28th March 1867	James Howard. Edward Tenney Bousfield.
Construction of horse rakes	1157	20th April 1867	Edward Howell. Thomas Hardy.
An improved construction and manufacture of the iron forks used in agriculture. (*Communicated by Louis Gabriel Hebert Fleury.*)	1168	22nd April 1867	William Edward Gedge.
Reaping and mowing machines (*Communicated by Walter Abbott Wood.*)	1499	20th May 1867	William McIntyre Cranston.
A new or improved tyre or guard for wheels of reaping, mowing and other machines.	1563	27th May 1867	William Affleck.
Harvesting machines (*Communicated by Leander M^{c}Cormick and Lambert Erpelding.*)	1568	27th May 1867	John Clayton Mewburn.
Construction of fingers for mowing-machines	1585	29th May 1867	William James Burgess.
Hay-making machines	1618	31st May 1867	Josiah Le Butt.
Apparatus by which the oscillations of the comb in the carding-engine, the knife in the cotton gin, and the saw in the reaping-machine or reciprocating saw, may be readily multiplied	1809	21st June 1867	William Robertson. Charles James Waddell.
Hay-making machines	1842	24th June 1867	Henry Richard John Denton.
An improved delivery to a reaping or mowing machine.	1883	28th June 1867	Lewis Brown Elliot.
Reaping and mowing machines	1952	4th July 1867	Robert Hellard.
Lawn mowing-machines	1995	8th July 1867	James Shanks.
Hay-making machines	2002	8th July 1867	William Andrews.
Certain improvements in agricultural apparatus called "horse rakes" (*for hay.*)	2060	13th July 1867	Rueben Sims. John Prest.
Reaping and mowing machines	2162	25th July 1867	John Brown. William Lillie.
Machinery for reaping and mowing	2260	5th Aug. 1867	Adam Carlisle Bamlett.
Lawn mowing-machines	2315	12th Aug. 1867	James Shanks. John Cargill.
Reaping-machines	2367	17th Aug. 1867	Mark Frow.
Machinery for cutting grass or corn	2507	4th Sept. 1867	James Howard. Edward Tenney Bousfield.
Driving the saw-blade cutters of reaping-machines	2582	12th Sept. 1867	Hugh Stewart.
Construction of horse rakes	2583	12th Sept. 1867	James Wilderspin.
Improvements in drill sowing-machines, in horse rakes and in horse hoes.	2639	19th Sept. 1867	Joseph Henry Sams.
Apparatus for sharpening the blades or knives employed in mowing and reaping machines.	2763	1st Oct. 1867	William Mitchell.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
REAPING, &c.—*continued.*			
Reaping and mowing machines - - -	2905	17th Oct. 1867	Daniel Pidgeon. William Manwaring.
Reaping and mowing machinery - - -	3022	26th Oct. 1867	Charles Edward Hall.
Reaping and mowing machines - - -	3441	3rd Dec. 1867	Richard Hornsby. James Edwin Phillips.
Improvements in machinery for spreading grasses, part of which improvements are also applicable to machines for cutting and collecting grasses or corn.	3475	6th Dec. 1867	William Newzam Nicholson.
Hay-making machines, horse hoes, horse rakes and other analogous agricultural implements or machines.	3538	12th Dec. 1867	Robert Boby.
REFLECTORS FOR LAMPS; REFLECTION OF LIGHT.			
Improved adjustable reflectors for lamps and lighting purposes.	534	27th Feb. 1867	Francis Vere Wright.
Globular and other forms of glass for ornamenting mirrors and other reflecting surfaces, and for making up other articles of glass.	835	22nd March 1867	Edward Samuel Tucker.
Gas regulators - - - - - (*employing a reflecting surface outside the regulator.*)	2173	26th July 1867	Edmund Smith.
RETORTS AND CRUCIBLES.			
Generating heat by the admixture and combustion of a hydro-carbon vapor, air and the gaseous components of steam - - - (*construction of retort.*) (*Communicated by Henry Rutger Foote.*)	560	28th Feb. 1867	Stillman Boyd Allen., Jairus Handy Winsor.
Manufacture of gas - - - -	624	6th March 1867	John Thompson.
Construction of retorts for reburning animal charcoal.	738	14th March 1867	Paul Thomas Goodwin.
Arrangement of apparatus for "scurfing" or removing carbon from gas retorts.	790	19th March 1867	James Hislop.
Apparatus for driving revolving retorts and cylinders.	802	20th March 1867	Paul Thomas Goodwin.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
RETORTS, &c.—*continued.*			
Improvements in utilizing the heating properties of petroleum and other liquid hydro-carbons and oils, and in apparatus employed therefor (*employing retorts.*)	930	29th March 1867	Arthur Barff. Joshua Kidd.
Arrangement and construction of furnaces for steam boilers, and various other useful purposes. (*for retorts.*) (*Communicated by Emmanuel Minary.*)	1495	20th May 1867	John Garrett Tongue.
Seal or dip pipes in connection with gas and other retorts	1578	28th May 1867	Henry Cockey. Francis Christopher Cockey.
Improvements in machinery or apparatus for separating liquids or moisture from substances, and also for revivifying and cooling animal charcoal and other substances, and for treating sugar. (*fire-clay retorts.*)	1707	10th June 1867	William Orr.
Construction of retorts for manufacturing and reburning animal charcoal.	1718	11th June 1867	John Fletcher.
Manufacture of illuminating gas	1819	21st June 1867	George Dickie.
Improvements in charging and emptying retorts, and in the machinery or apparatus employed therefor.	1820	21st June 1867	George Simpson.
Utilization of a certain waste material obtained in the manufacture of hydro-carbon liquids. (*for crucibles.*)	1888	28th June 1867	John Carrington Sellars.
Improvements in the manufacture of gas and in apparatus connected therewith	2004	9th July 1867	John James Buckley. Charles Hook.
Improved methods of constructing steam generators for engines, new furnaces connected therewith, and the mode of working them, with machinery in combination with the uses to which they are applicable. (*rotating retort.*)	2792	4th Oct. 1867	Henry Pinkus.
Apparatus for burning and distilling petroleum and other oils, to generate steam and for other purposes. (*Communicated by Adam Robertson and Ananias Smith.*)	3183	11th Nov. 1867	Clinton Edgcumbe Brooman.
Improvements in coating metals and metallic articles for the purpose of protecting or preserving the same from oxidation and decay.	3288	20th Nov. 1867	Baroness Camille de Lavenant.
An improved material or composition to be employed for covering or coating the interior surfaces of moulds, crucibles or ducts, previous to their receiving the molten metal in the process of casting and for other purposes.	3473	6th Dec. 1867	James Durrans.
Improvements in the manufacture of fire-bricks, tiles and solid or hollow fire-lumps, and in the manufacture of retorts, pipes, crucibles or other hollow vessels, or moulds required to resist a high degree of heat, and also in the manufacture of ornamental bricks, tiles, quarries, trusses, bosses, vases, busts, figures, columns, capitals, bases, cornices, copings, tablets, finials, and other articles of an ornamental character employed in building and in architectural decorations.	3501	9th Dec. 1867	Henry Bessemer.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
RETORTS, &c.—*continued.*			
Gas retort ovens and furnaces - - - (*Communicated by John Olof Wallin.*)	3554	14th Dec. 1867	Henry Atkinson.
Mode of and apparatus for combining the vapours of liquid hydro-carbons with oxygen and hydrogen, and burning the mixture as fuel. (*construction of retort.*) (*Communicated by David Oliver Macomber.*)	3706	31st Dec. 1867	Marc Antoine François Mennons.
ROPES, CORDAGE, TWINE, OAKUM, WIRE ROPES.			
A new and improved machine for dressing or waxing all kinds of thread. (*and rope.*) (*Communicated by Alfred Thiriez and Edouard Thiriez.*)	224	28th Jan. 1867	Henri Adrien Bonneville.
Improvements in apparatus and in the mode of operation for winding, tarring, sizing, polishing, or putting a finish on and singling machine-spun and other yarns, in the manufacture of rope, cordage and lines of every description and material - - - - - -	245	29th Jan. 1867	Hiram Craven. James Speeding.
Machinery for the manufacture of oakum from old ropes, cordage or other fibrous materials.	451	19th Feb. 1867	Edward Brasier.
Machinery or apparatus for spinning and doubling silk, cotton, wool or other fibrous materials. (*and making ropes.*)	693	11th March 1867	William Dempsey.
Improvements in the preparation and application of isolating compositions for the protection of metallic surfaces from oxidation, and for the preservation of wood and other materials, and in the preparation of the residue of vegetable oils to be employed for such purposes. (*preservation of ropes.*)	814	21st March 1867	Giacomo Eduardo Marchisio.
Improvements in apparatus for effecting the drawing, spinning, twisting and laying of hemp, flax, tow, worsted, wool, silk, cotton, china grass or other fibrous material, for the manufacture of yarn, thread, twine, cord or rope, which improvements are also applicable to the manufacture of cord or rope from iron or other metal wire.	938	29th March 1867	William Bywater.
Improvements in the manufacture of oakum and in the apparatus employed therein.	1121	16th April 1867	John Eliot Hodgkin.
Manufacture or treatment of oakum or other fibrous substances for caulking ships and for other similar purposes.	1674	7th June 1867	Edwin Senior Atkinson.
Machinery for manufacturing cordage, webbing and other like articles. (*Communicated by Jesse Fewkes.*)	1933	3rd July 1867	William Robert Lake.
An improved case or box for holding twine or cord	2293	9th Aug. 1867	Frederick Julius Seymour.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
ROPES, &c.—*continued.*			
Machinery or apparatus employed for finishing cotton band, twine, ropes, cordage and other fibrous substances.	2446	28th Aug. 1867	Henry Hanson.
Machines for manufacturing chains, cords, ropes, and the manner of making such chains, cords and ropes.	2492	3rd Sept. 1867	Achille Edward Gelhaye.
Stoppers or controllers for ships' cables - -	2545	9th Sept. 1867	Andrew Paul.
Apparatus for hauling or winding ropes - - (*see* "HOISTS.")	2759	1st Oct. 1867	James Grafton Jones.
Improvements in the construction of railways and railway carriages, and in the means for propelling the said carriages. (*construction of propelling cables.*) (*Communicated by Charles Thompson Harvey.*)	2896	15th Oct. 1867	William Robert Lake.
Machines for twisting lines, cords, ropes and cables, and hanking and coiling the same. (*Communicated by Chauncey Orrin Crosby.*)	3045	29th Oct. 1867	Edward Thomas Hughes.
Instruments for joining blind cords and other cords	3215	13th Nov. 1867	Ulysse Perrenoud-Würflein.
Improvements in apparatus for rendering innocuous the momentum of heavy bodies so as to prevent injury and damage from concussion, applicable to ships' cables, cranes, windlasses, capstans, hoists, lifts, weighing machines, ship and fort armour, to training guns, to railway trains, station buffers, fenders to pier-heads, gangways, breakwaters and other similar structures, which apparatus is also applicable for storing and accumulating power, which may be used for throwing projectiles, raising or moving heavy weights, such as ships, stranded or sunken vessels, propelling carriages and other purposes.	3302	21st Nov. 1867	William Graham McIvor.
A new or improved material to be employed in the manufacture of cord, rope, lace, paper, cardboard, pasteboard and other articles.	3520	11th Dec. 1867	Faustino Vita.
A new or improved machine for rubbing, washing and sizing ropes, cords or twines.	3588	17th Dec. 1867	Saddleton Marsters.
An elastic coupling for the prevention of sudden or undue strains upon ropes or chains when used in towing, hauling or lifting - - -	3641	23rd Dec. 1867	William Dixon. William Brown.
An improved apparatus for drawing and spinning hemp, flax and other fibrous materials, for making ropes and cables.	3712	31st Dec. 1867	Jacques Novikow.
For Telegraphic Cables, *see* "TELEGRAPHS."			

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SALT AND SALTPETRE.			
Mode of raising brine in or from boreholes of great depth.	48	7th Jan. 1867	Carl Friedrich Claus.
Boilers or apparatus applicable to the generation of steam and to other purposes. (*manufacture of salt.*)	303	2nd Feb. 1867	Benjamin Harlow.
Improvements in steam-boilers, saltpan and other furnaces or fireplaces, for the better combustion of fuel.	354	7th Feb. 1867	Herman Eugene Falk.
An improved method of consuming smoke in furnaces. (*in salt making.*)	454	20th Feb. 1867	William Harrison.
Boilers and apparatus for generating steam and evaporating fluids. (*arrangement of salt pans.*)	757	16th March 1867	Thomas Dunn.
Furnaces for evaporating brine and for other heating purposes - - - - -	830	22nd March 1867	George Cross. Richard Evans.
An improved method of consuming smoke in furnaces. (*for salt making.*)	1153	20th April 1867	William Harrison.
Constructing furnaces for heating salt pans and for other purposes.	1558	25th May 1867	William Dutton.
Apparatus and means for burning combustible liquids, vapours and gases, to obtain heat and light therefrom - - - - - (*for heating salt pans.*)	2414	22nd Aug. 1867	James Lee Norton. George Hawksley.
Apparatus used in the manufacture of salt -	2575	11th Sept. 1867	Joseph Davies.
An improved mode of and apparatus for evaporating liquids with a view to obtaining the saccharine, saline or other substances contained therein, in a dry or crystalline state.	3721	31st Dec. 1867	Robert Tooth.
SEWING AND EMBROIDERING.			
Construction of button-hole sewing-machines -	8	1st Jan. 1867	George Baldwin Woodruff. George Browning.
Sewing-machines - - - - - (*Communicated by Georges Bernhard Seibert.*)	103	15th Jan. 1867	Henri Adrien Bonneville.
Sewing machinery or apparatus for fringing shawls, mantles or similar articles.	113	16th Jan. 1867	Joseph Craven.
Sewing machinery or apparatus for fringing shawls, mantles or other fabrics requiring to have a fringe thereon - - - - -	163	22nd Jan. 1867	Jonathan Northrop. Samuel Tetley. William Harrison Tetley.
Improvements in sewing machinery and in the stitches to be produced by such machinery.	186	24th Jan. 1867	George Baldwin Woodruff.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SEWING, &c.—*continued.*			
Improvements in the manufacture of boots and shoes, and in machinery or apparatus therefor, which improvements are also equally applicable to the manufacture of "portemonnaies," travelling bags, parts of harness, and in fact to almost all such manufactures as require fixing, basting, cementing, sewing or stitching. (*Communicated by Jules Constant Touzet.*)	206	26th Jan. 1867	Bristow Hunt.
Sewing-machines (*Communicated by Elias Howe, jun'.*)	396	12th Feb. 1867	Alfred Vincent Newton.
A new or improved method of working or producing designs in wool.	481	21st Feb. 1867	Louisa Hartland Mahon.
An improved brake for sewing-machines (*Communicated by John Augustus Minor and Robert Bowman.*)	561	28th Feb. 1867	Edward Thomas Hughes.
Improvements in machinery or apparatus for sewing and ornamenting textile fabrics and other like goods, and in the appliances connected therewith. (*Communicated by George Joseph Richardson.*)	574	1st March 1867	John Henry Johnson.
Improvements in or applicable to sewing-machines	636	7th March 1867	Ira Dimock. James Gresham.
Sewing-machines	658	8th March 1867	Thomas Cook.
Sewing-machines	687	11th March 1867	Alonzo Kimball.
Sewing-machines (*Communicated by James Sewell M'Curdy.*)	792	19th March 1867	Alfred Vincent Newton.
Sewing-machines	806	20th March 1867	Sidney Mason Tyler.
Lace, warp, knitting or other similar machinery for the manufacture of looped and fast-knotted fabrics, part of such machinery being applicable to sewing, stitching or quilting purposes. (*Communicated by Charles Keenan, John Keenan, William Birks, senior, and William Birks, jun'.*)	923	29th March 1867	John Garrett Tongue.
Sewing machinery (*Communicated by James Alford House and Henry Alonzo House.*)	970	1st April 1867	Alfred Vincent Newton.
Sewing-machines	1057	9th April 1867	William Newton Wilson.
Sewing-machines	1081	11th April 1867	George Slater.
Sewing-machines	1186	24th April 1867	Lewis Budd Bruen.
An improved manufacture of boots and shoes	1240	29th April 1867	Edward Waterman.
Construction of sewing-machines	1251	30th April 1867	Thomas Webb.
An improved combination of mechanism for operating certain parts of sewing-machines	1286	2nd May 1867	Joseph Stuart. James Henry Smith.
Construction of button-hole sewing-machines	1399	11th May 1867	George Browning.
A new or improved shuttle for sewing-machines	1410	13th May 1867	Robert Henry Padbury.
Sewing-machines (*Communicated by John Nathaniel Tarbox.*)	1451	16th May 1867	Clinton Edgcumbe Brooman.
Improvements in driving sewing-machines and in apparatus employed therefor.	1462	17th May 1867	John Smith.
An improved binder for sewing-machines	1481	18th May 1867	John White.
Sewing-machines	1516	21st May 1867	John Mabson.
Braiders or embroidering apparatus to be used with sewing-machines. (*Communicated by Louis Morris.*)	1551	24th May 1867	George Tomlinson Bousfield.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SEWING, &c.—*continued.*			
Improvements in reels or receivers upon which threads, silks or other fibrous material, in connection with needles (threaded or otherwise) are arranged, as also in the arrangement of needles threaded with any fibrous material, for the purpose of facilitating the use or uses of the same for all purposes of needle-work.	1633	3rd June 1867	William Pidding.
Sewing-machines - - - - - - (*Communicated by Nathan Adolphus Baldwin.*)	1677	7th June 1867	Edward Thomas Hughes.
Improvements in sewing-machines and in apparatus connected therewith - - - -	1690	8th June 1867	Henry Willis. George Rice. Arthur Maxfield.
Sewing-machines - - - - -	1761	17th June 1867	James Fletcher. William Carr.
Apparatus for sewing saddlery and other leather or strong materials. (*Communicated by Auguste Jacques Hurtu and Victor Joseph Hautin.*)	1798	20th June 1867	Alexander Melville Clark.
Production of ornamental textile fabrics - -	1807	20th June 1867	William Clarke.
Machines for sewing and stitching - - -	1810	21st June 1867	Henry Oram.
Machinery for manufacturing cordage, webbing and other like articles. (*applicable to sewing.*) (*Communicated by Jesse Fewkes.*)	1933	3rd July 1867	William Robert Lake.
Sewing-machines - - - - - -	2275	7th Aug. 1867	Emil Cornely.
Sewing-machines - - - - -	2428	24th Aug. 1867	Martin Samuelson.
Machinery or apparatus for stitching or ornamenting and uniting fabrics.	2439	27th Aug. 1867	William Muir.
Manufacture of appliqué embroidery on tulle, muslin or similar fabrics in various colours and designs. (*Communicated by Jean François Planus, jeune.*)	2510	5th Sept. 1867	Arthur Charles Henderson.
Sewing-machines - - - - - -	2530	7th Sept. 1867	Thomas Cook.
Improvements in or applicable to sewing-machines	2609	16th Sept. 1867	George Francis Bradbury. Thomas Chadwick.
Improvements in means or apparatus to be employed to sewing-machines, and to other machines wherein cams or cam surfaces are employed working in connection with trucks or rollers, by means of which they are in working rendered comparatively noiseless.	2610	16th Sept. 1867	William John Cunningham.
Sewing-machines - - - - -	2636	19th Sept. 1867	Thomas Bletcher.
Sewing-machines - - - - - -	2687	24th Sept. 1867	William Winter.
An improved combined tuck creaser and self-guide or baster, chiefly applicable to sewing-machines. (*Communicated by Henry William Fuller and Isaac Williams Barnum.*)	2705	25th Sept. 1867	Alexander Melville Clark.
Sewing-machines - - - - - -	2726	27th Sept. 1867	Martin Samuelson.
Sewing-machines - - - - - (*Communicated by Benoni Jones and Alexandre Rouyer.*)	2770	2nd Oct. 1867	Arthur Charles Henderson.
Machinery for sewing boots and shoes - - (*Communicated by Augustus Destouy and Frederic Renaud.*)	2779	2nd Oct. 1867	William Robert Lake.
Certain improvements in sewing-machines - -	2794	4th Oct. 1867	Julius Gutmann.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SEWING, &c.—*continued.*			
Machinery or apparatus employed in the manufacture of braid. (*applicable to sewing-machines.*) (*Communicated by George Rehfuss.*)	2799	4th Oct. 1867	John Henry Johnson.
Sewing-machines - - - - - (*Communicated by François Jean Baptiste Victor Brosser and Charles Edward Brosser.*)	2867	12th Oct. 1867	Henry Bernoulli Barlow.
Sewing-machines - - - - -	2895	15th Oct. 1867	Martin Samuelson.
Construction of sewing-machines - - -	2962	22nd Oct. 1867	Thomas Webb.
Sewing-machines - - - - - (*Communicated by John Squire Andrews.*)	3106	4th Nov. 1867	Alfred Vincent Newton.
Machines for sewing the seams of looped fabrics - (*Communicated by Edward Elisha Kilbourn.*)	3192	11th Nov. 1867	George Tomlinson Bousfield.
Hem folders and tuckers for sewing-machines -	3222	14th Nov. 1867	John Morrison.
An improved method of conveying rotatory motion to axles. (*moving sewing-machines.*)	3271	18th Nov. 1867	Kenelm John Winslow.
Improvements in the method of sewing sheets of paper, forming books and pamphlets, and in machinery for effecting the same - -	3306	22nd Nov. 1867	Robert Leighton. Thomas Kirkham.
Improvements in placing, arranging or fixing needles and threads and other like fibrous materials on to reels or receivers, so as to render them more convenient for use, also in the manufacture and forms of such reels or receivers, and in the materials thereof.	3436	3rd Dec. 1867	William Pidding.
Improvements in elastic packings for the pistons of steam-engines and for other purposes, and in the machinery employed in the manufacture of such packings. (*braiding machine.*)	3495	9th Dec. 1867	Edward Keirby.
Improvements in the manufacture of hats and other felted articles of wearing-apparel, and in machines employed for these purposes. (*sewing in the "head leather."*) (*Partly communicated by Rudolf Eickemeyer.*)	3716	31st Dec. 1867	William Wilson.
SHEARING SHEEP, CLIPPING HORSES.			
Improvements in cutting hair off horses or other animals, and in the machinery or apparatus employed therefor.	982	2nd April 1867	James Shanks.
A new instrument for clipping or shearing horses or other animals, also applicable to other similar useful purposes.	3498	9th Dec. 1867	William Clark.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SHIP AND BOAT BUILDING, SHEATHING, REPAIRING, WORKING, LOADING AND UNLOADING; MASTS, SPARS, &c.			
Improvements in the construction of ships and other navigable vessels, and in the mode of rigging, propelling and steering the same, including children's toy ships.	95	14th Jan. 1867	Robert Atkin.
Improvements in ships or vessels of war, part of which improvements are applicable to other ships or vessels.	178	24th Jan. 1867	Fitzmaurice Palmer.
Improvements in constructing and applying defensive armour and also bullet-proof porthole covers for the defence of ships and other vessels, forts, batteries and other fortifications, parts of which improvements are applicable to other purposes.	193	25th Jan. 1867	Thomas Berney.
Improvements in the construction of armour plates, or in the method of fixing the same to ships, forts, turrets and other similar structures, part (or parts) of which improvements are applicable to other purposes.	308	4th Feb. 1867	Sir John Benson (Knight).
A new or improved composition for the coating and preservation of ships' bottoms.	425	15th Feb. 1867	James Lamble.
Improvements in opening, closing and securing windows, doors and shutters, which improvements are also applicable to the opening, closing and securing the port holes of ships, and in the machinery or apparatus employed therein.	432	16th Feb. 1867	James Carter.
Uniting iron and steel in sheets, plates, rails, bars, rods, links, bands, hoops, tubes or other forms, applicable to navigable vessels, forts, bridges, roofs, floors, tanks or chests.	469	21st Feb. 1867	William Bridges Adams.
An improved means or apparatus to be used for travelling through the atmosphere and on land and water.	473	21st Feb. 1867	Joseph Meyers Kaufmann.
Apparatus for removing seaweed, shellfish and other foreign matters, from the bottoms or submerged parts of ships and other floating structures.	484	22nd Feb. 1867	John Harrison.
A method of protecting the outer surface or external parts of iron ships from corrosion or from animal or vegetable matter - -	745	15th March 1867	Joseph Westwood. Robert Baillie.
Improvements in the preparation and application of isolating compositions for the protection of metallic surfaces from oxidation, and for the preservation of wood and other materials, and in the preparation of the residue of vegetable oils to be employed for such purposes. (*applying mastic to ships' hulls.*)	814	21st March 1867	Giacomo Eduardo Marchisio.
Manufacture of ships' sheathing, armour sheathing and fastenings.	856	23rd March 1867	Joseph Betteley.
Covering and protecting ships, forts and buildings	903	28th March 1867	William Richard Dawson. John Bailey Davies.
Improvements in bending and circling metallic plates, and in machinery or apparatus employed therefor. (*for masts and yards.*)	949	30th March 1867	John Fleming.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SHIP-BUILDING, &c.—*continued.*			
An improved mode of hanging ships' rudders - (*Communicated by Henry Harris Pember and Uriah Furman Rogers.*)	956	30th March 1867	Henri Adrien Bonneville.
An improved fid - - - - - (*Communicated by Henry Harris Pember and Uriah Furman Rogers.*)	957	30th March 1867	Henri Adrien Bonneville.
An improved mode of and means for closing and fastening the port lights of ships and other vessels. (*see* "LAMPS.") (*Communicated by Edward Seymour Hidden.*)	966	1st April 1867	William Robert Lake.
Boats - - - - - - -	996	3rd April 1867	Théodore Faucheux.
Improvements in apparatus to be used for towing ships or vessels, and in apparatus for laying submarine telegraph cables. (*or ballasting ships.*)	1015	4th April 1867	James Maze Kilner.
Apparatus for propelling vessels - - - (*and turning or stopping.*)	1039	6th April 1867	Walter Watson Hughes.
An improved machine for cutting scale-board, and for the manufacture of the scale-board or material cut by said machine into an improved fabric for structures generally. (*for ship building, masts, spars, &c.*) (*Communicated by John Kinney Mayo.*)	1051	8th April 1867	William Clark.
Armour plating and sheathing of ships of war and fortifications.	1082	11th April 1867	Theodore Anthony Rochussen.
Improvements in the manufacture of screws chiefly applicable for fixing armour plates.	1089	12th April 1867	Henry Patterson Boyd.
Velocipedes - - - - - (*used as boats.*)	1161	20th April 1867	William George Crossley.
Turrets and broadsides of ships of war - -	1176	23rd April 1867	Joseph Westwood.
Life boats - - - - - (*Communicated by Albert Lintonner Shears and William Spencer Driggs.*)	1211	26th April 1867	Alexander Melville Clark.
Construction of fortifications - - -	1271	2nd May 1867	John Brown.
Improvements in the construction of landing stages and iron ships or vessels, also in propelling and steering ships or vessels generally.	1309	4th May 1867	Evan Leigh.
Improvements in telegraph posts, also applicable to ships' masts and posts or supports for other purposes - - - -	1319	6th May 1867	Paul Haenlein. Joseph Fisher. Rowland George Fisher.
Manufacture of small model or toy boats or ships from paper or cardboard. (*see* "TOYS.")	1367	9th May 1867	Albert Fournier.
Construction of armour-plated ships and batteries -	1417	13th May 1867	James William Butler.
Construction of ships and boats - - -	1434	15th May 1867	Francis Bonney.
Construction of ships' water-closets - -	1473	18th May 1867	James Sloan.
Building or construction of ships' sail yards -	1496	20th May 1867	Edward Bond.
Improvements in the construction of a steam vessel suitable for ferrying laden trains across the ocean, complete, together with its landing-places, breakwaters, and modes of protection from marine insects and fouling, which improvements are also generally applicable to other vessels, and to the protection of iron and wood exposed to the action of the sea water.	1503	21st May 1867	Edward Henry Cradock Monckton.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SHIP-BUILDING, &c.—*continued.*			
Means of and apparatus for landing, trans-shipping or discharging grain and other substances in or from ships, vessels, granaries or warehouses, and for taking or drawing samples of grain from granaries.	1540	23rd May 1867	Louis Stuckenschmidt.
An improved combination of wood and textile substance for the construction of boats, baths and other vessels to be folded up for carriage.	1627	1st June 1867	Wilmot Bradford.
An improved construction of raft - - (*Communicated by Charles Wheeler Denison.*)	1649	4th June 1867	Herbert William Hart.
Manufacture or treatment of oakum or other fibrous substances for caulking ships and for other similar purposes.	1674	7th June 1867	Edward Senior Atkinson.
Application of plastic and fibrous materials to the manufacture of moulded or formed articles. (*boats.*)	1700	10th June 1867	John Macintosh.
An improved pontoon bridge also applicable as a life raft and lighter. (*Communicated by John Wright.*)	1723	12th June 1867	John Cochrane.
Improved means and apparatus for raising sunken vessels, which invention is also applicable for preventing vessels from foundering.	1778	18th June 1867	Joseph Marshall Frost.
A new metallic zinc paint - - - (*for coating ships' bottoms.*)	1845	25th June 1867	James Webster.
Improvements in the manufacture of carriage bodies, and which said improvements are also applicable to the manufacture of pleasure and other boats, and other like purposes where great strength and lightness is of importance.	1903	29th June 1867	Henry John Cox.
Improvements in compositions for preventing the fouling of the bottoms of ships, floating docks and other similar structures, and in the mode or means of applying the said compositions.	1924	2nd July 1867	George Augustus Frederick Fowke.
Mode of applying metal sheathing to iron ships, caissons and floating docks, and other iron constructions subject to corrosion.	1961	4th July 1867	William Day.
A new or improved composition for coating ships and other vessels and submerged structures.	2012	9th July 1867	Robert Smith.
Improvements in the construction of life boats, and in detaching tackle for boats. (*Communicated by Milton Vorse Nobles, David Decker and William James Dounce.*)	2052	12th July 1867	Alexander Melville Clark.
An improvement in fastening wood to iron, applicable in securing the planking of composite ships to the iron frame, and for other similar purposes.	2057	12th July 1867	James Laing.
Mode of constructing and propelling steam-vessels (*Communicated by Stephen Johnson Gold and Henry James Weston.*)	2178	27th July 1867	Edward Thomas Hughes.
Apparatus for hauling vessels or other heavy bodies into deep water.	2204	30th July 1867	Andrew Murray.
Improvements in dredging machinery, and apparatus or appliances for the stowage and discharge of substances dredged up, the said apparatus or appliances being applicable to lighters, barges or vessels used for other purposes.	2279	7th Aug. 1867	Richard Henry Michell.
Construction of boats - - - -	2287	8th Aug. 1867	Henry William Withers.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SHIP-BUILDING, &c.—*continued.*			
Uniting and treating iron, steel and other metals in sheets, plates, rails, bars, rods, links, bands, hoops, tubes or other formes, applicable to navigable vessels, forts, guns, bridges, roofs, floors, boilers, heaters, tanks, chests or like structures.	2376	19th Aug. 1867	William Bridges Adams.
Construction of ships and vessels - - -	2412	22nd Aug. 1867	Thomas Walmsley Lawson.
Mode of covering and protecting iron plates from the action of sea water.	2413	22nd Aug. 1867	John McIntyre.
Construction of ships and other vessels - - (*Communicated by Amand Grancher.*)	2528	6th Sept. 1867	Alexander Melville Clark.
Fitting ships' rudders - - - - -	2555	9th Sept. 1867	John Medhurst.
Method of and materials for manufacturing ammunition boxes, pontoons, baggage and other waggons and carriages, and various equipments for military, naval and civil purposes. (*cases for life boats.*)	2630	19th Sept. 1867	Thomas Charles Clarkson.
Improvements in the treatment and application of the residuum which results from the clarification and purification of cotton seed oil and other vegetable drying oils, and of the residuum which results from the distillation or other analogous treatment of the said material, for the manufacture and preparation of isolating preservative and anti-corrosive compositions.	2656	21st Sept. 1867	Giacomo Eduardo Marchisio.
Construction and mode of propelling and maneuvering floating batteries and other vessels intended for the purposes of naval defence and attack.	2743	28th Sept. 1867	John Elder.
A new or improved apparatus for removing adhering matters from the bottoms and sides of ships or other navigable vessels whilst at sea.	2748	30th Sept. 1867	Charles Powell Jones.
Construction of ships and vessels - -	2798	4th Oct. 1867	George Henry Duncan Mathias.
A new or improved composition to be used to prevent the oxidation of iron, the fouling of ships' bottoms and other submerged things, and preserving wood from decay and from worms, and also preserving iron and wood exposed to the action of the atmosphere.	2848	10th Oct. 1867	Thomas Blackhurst.
An improved mode of preparing iron for the manufacture of various articles where great strength and capability of resistance to tensile strain or torsion is required. (*armour plates.*) (*Communicated by Michel Pawlowitch Lwoff.*)	2865	11th Oct. 1867	William Edward Newton.
Improvements in revolving batteries and in the means for working the same. (*Communicated by James Buchanan Eads.*)	2888	14th Oct. 1867	William Robert Lake.
Improvements in the manufacture of felts and in machinery connected therewith. (*for sheathing.*)	2946	19th Oct. 1867	James Anderson.
Apparatus for discharging projectiles from vessels or forts below the water line. (*Communicated by George Ingle.*)	2949	19th Oct. 1867	Richard Watkins.
Improvements in plating or protecting ships of war, fortifications and other like structures, and the manufacture of the plates employed therefor.	3003	25th Oct. 1867	Gustav Julius Günther.
Manufacture of armour plates - - -	3019	26th Oct. 1867	Francis Montagu Smith.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SHIP-BUILDING, &C.—*continued.*			
Compositions for coating the bottoms of iron, steel and wooden ships and other navigable vessels, and marine works generally.	3028	28th Oct. 1867	Joseph de Silva.
Construction of ships and other vessels propelled by screws.	3056	30th Oct. 1867	Thomas Edward Symonds.
Mode of and instruments or tools for securing the metal bolts employed in the construction of timber ships and other structures. (*Communicated by Johann Carl Hammer.*)	3082	2nd Nov. 1867	Matthew Augustus Soul.
Mode of applying metal sheathing to composite ships with iron fastenings.	3095	4th Nov. 1867	William Day.
Construction of armour for the defence of ships, forts, batteries and other constructions.	3145	7th Nov. 1867	Edward Sacré.
Manufacture of flexible air-tight cylinders or cases to be used as pontoons and in forming rafts.	3175	9th Nov. 1867	George Frederick Parratt.
Defensive armour for war vessels and forts - - (*Communicated by Obadiah Marland.*)	3185	11th Nov. 1867	William Robert Lake.
Improvements in apparatus for rendering innocuous the momentum of heavy bodies so as to prevent injury and damage from concussion, applicable to ships' cables, cranes, windlasses, capstans, hoists, lifts, weighing machines, ship and fort armour, to training guns, to railway trains, station buffers, fenders to pier-heads, gangways, breakwaters and other similar structures, which apparatus is also applicable for storing and accumulating power, which may be used for throwing projectiles, raising or moving heavy weights, such as ships, stranded or sunken vessels, propelling carriages and other purposes.	3302	21st Nov. 1867	William Graham McIvor.
Merchants' ships and other vessels and appliances connected therewith.	3331	25th Nov. 1867	George Bell Galloway.
Construction or arrangement of piles or fagots for wrought-iron beams, girders or bars of different forms. (*for ships.*) (*Communicated by George Walters and Thomas Shaffer.*)	3355	27th Nov. 1867	John Henry Johnson.
An improved mode of and means for raising sunken vessels.	3697	30th Dec. 1867	John Emery Gowen.

For Ships' Logs and Sounders, *see* "MEASURING PROGRESS."
For Ships' Pumps, *see* "PUMPS."
For Graving Docks, *see* "DOCKS."
For Rudders, *see* "STEERING."
For Anchoring Ships, *see* "ANCHORS."
For Ventilating Ships, *see* "VENTILATION."
For Lighting Ships, *see* "LAMPS."
For Ships' Compasses, *see* "COMPASSES."

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SHIPS' BOATS (*Lowering and Disengaging*).			
An improved boat-detaching apparatus - - (*Communicated by Gideon Blackburn Massey.*)	464	20th Feb. 1867	George Haseltine.
An improved self-acting tackle hook - - (*Communicated by Charles Luxton.*)	1202	25th April 1867	Alexander Melville Clark.
Apparatus for lowering, detaching and picking up ships' boats. (*Communicated by Robert Creuzbaur.*)	1469	17th May 1867	Alfred Vincent Newton.
Improvements in the construction of life boats, and in detaching tackle for boats. (*Communicated by Milton Vorse Nobles, David Decker and William James Dounce.*)	2052	12th July 1867	Alexander Melville Clark.
Davits for ships and other vessels - -	2937	18th Oct. 1867	Montague Alex.
Merchants' ships and other vessels and appliances connected therewith. (*lowering boats.*)	3331	25th Nov. 1867	George Bell Galloway.
SHIPS' RIGGING AND SAILS; REEFING AND FURLING SAILS; SHIPS' RIG.			
Improvements in the construction of ships and other navigable vessels, and in the mode of rigging, propelling and steering the same, including children's toy ships.	95	14th Jan. 1867	Robert Atkin.
Apparatus for securing the sheets of fore and aft sails - - - - - -	1323	6th May 1867	Richard Taylor. Ebenezer Poulson.
Swivels for fishing tackle and for other purposes - (*ships' tackle.*)	1765	17th June 1867	Joseph Welch.
Reefing and furling upper top-sails - -	1848	25th June 1867	Fridolf Höök.
Apparatus for reefing and furling ships' square sails.	2066	13th July 1867	Henry Duke.
Reefing topsails from the deck - - -	2440	27th Aug. 1867	John Whitmarsh Webb.
A projectile anchor and block for launching of the life-boat and other boats in rough weather, and for ships' use in cases of loss of anchorage.	2534	7th Sept. 1867	John Banting Rogers.
An improved sheave or pulley for ships' blocks or other purposes.	3521	11th Dec. 1867	Georges Henry Nick.
Improvements applicable to the rigging, chains, windlasses, anchors and other parts of ships or vessels, or to collieries, railways, rolling stock or other purposes, to prevent sudden blows jerks or strains.	3637	21st Dec. 1867	James Davison.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SHIRTS, COLLARS, WRISTBANDS, NECK-TIES, SCARFS, DRAWERS, HOSE.			
Construction of scarfs - - - -	13	2nd Jan. 1867	Alfred Ward. Charles George Virgo.
A new and useful fabric for elastic stockings, stays or corsets, bandages and other similar and analogous articles.	592	2nd March 1867	Anne Catherine Laurys.
An improved or metallic front for shirts or other articles of underclothing.	606	5th March 1867	John Martin Stanley.
An improvement in ornamenting collars, shirt fronts and wristbands.	612	5th March 1867	John Edward Smith.
Brooch and other fastenings - - - (*for neckties.*)	685	11th March 1867	Joseph Josiah Blackham.
Ironing, pressing, finishing and damping machinery (*for shirt makers.*)	793	19th March 1867	James Moore Clements.
Collars, cuffs and similar articles composed of paper or of paper and tissue combined.	829	22nd March 1867	Charles Kaufmann.
Certain improvements in the method and means of securing buttons and buttonholes, hooks and eyes, to wearing-apparel and other objects to which such fastenings are applied. (*wristbands of shirts.*)	873	26th March 1867	James Hesse.
Improvements in the manufacture of certain articles of dress or wearing-apparel, such as coats, trousers, vests, jackets, mantles, shirts, drawers and similar articles, and in apparatus employed therein, which apparatus is also applicable in figure weaving.	1020	5th April 1867	Samuel Leather.
An improved manufacture of elastic woven fabric applicable to the manufacture of gloves, drawers, under shirts and other elastic articles usually made from looped or knitted fabrics - -	1998	8th July 1867	Archibald Turner. William Hemsley.
Manufacture of gloves, undershirts, drawers, socks, stockings and other articles of clothing which are usually made from knitted or looped fabrics - - - - - -	2311	12th Aug. 1867	Archibald Turner. William Hemsley.
A new or improved apparatus for adjusting or securing scarfs, neckties and other articles of apparel.	2616	17th Sept. 1867	Samuel Jay.
An improved fastener for neck-ties or other similar articles for ladies' or gentlemen's use - -	2723	26th Sept. 1867	Thomas Vaughton. Oliver Vaughton.
Preparation or treatment of linen and cotton fabrics in order to adapt them to the manufacture of certain articles of wearing-apparel - - (*ties, scarfs, &c.*)	2738	28th Sept. 1867	Alfred Ward. Charles George Virgo.
An improved fastening for neckties, scarfs, belts and other articles. (*Communicated by Simon Hayem, ainé.*)	2933	18th Oct. 1867	Samuel Solomon Maurice.
Improvements in collars, cuffs, anklets, belts and other like articles of wearing-apparel - -	3486	7th Dec. 1867	John Blakey. Howard Busby Fox.
Treatment of paper and certain woven fabrics for rendering them ornamental and durable as articles of dress, and for decorative and ornamental purposes. (*neck-ties or bows.*)	3535	12th Dec. 1867	Edward Reed Sintzenich.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SHOT, SHELL, BULLETS AND OTHER PROJECTILES; TORPEDOES.			
Improvements in guns or cannon and in projectiles to be used therewith, also applicable to fire-arms generally and their projectiles.	56	9th Jan. 1867	William Jeremiah Murphy.
Improvements in fire-arms and ordnance, and in the cartridges or projectiles to be used therewith.	67	10th Jan. 1867	William Burnet Robins.
Shot or ammunition lifters or holders and carriages for the same.	85	12th Jan. 1867	Henry Duncan Preston Cunningham.
Improvements in guns, projectiles and cartridges, and in the construction of the same.	189	25th Jan. 1867	George Clark.
Improvements in the construction, form and use and means of firing of projectiles, and in the construction and use and means of firing of ordnance and other arms.	213	26th Jan. 1867	Thomas Berney.
An improved method of casting articles in iron and steel. (*projectiles.*) (*Communicated by Nicolas Pooteeloff.*)	244	29th Jan. 1867	William Edward Newton.
Fire-arms, ordnance and projectiles - -	399	13th Feb. 1867.	Alexander John Paterson.
Projectiles for rifles and ordnance - - -	884	26th March 1867	George Hookham.
An improvement applicable to shells and other hollow projectiles. (*Communicated by William Sully Beebe.*)	1050	8th April 1867	William Edward Newton.
Improvements in breech-loading fire-arms, and likewise the cartridges and balls to be used therewith.	1143	18th April 1867	Edward Lindner.
Treating iron to obtain metallic compounds for various uses. (*for shot cylinders.*)	1461	17th May 1867	Andrew Linmere Dowie.
Improvements in guns, projectiles and cartridges, and in the construction of the same.	1757	15th June 1867	George Clark.
Projectiles and cartridges for ordnance and fire-arms	1806	20th June 1867	John Webster Cochran.
Improvements in breech-loading fire-arms and in cartridges and projectiles, a part of which improvements is also applicable for converting muzzle-loading fire-arms into breech-loading fire-arms.	1971	5th July 1867	James MacNaughton.
Projectiles - - - - - (*Communicated by Jules Félix Gévelot.*)	2190	29th July 1867	Alexander Melville Clark.
Ordnance and machinery to be used in throwing projectiles, part of which machinery is applicable for other purposes.	2343	14th Aug. 1867	Henry Bessemer.
Construction of concussion fuzes for the explosion of projectiles.	2421	23rd Aug. 1867	Edward Augustus Dana.
A projectile anchor and block for launching of the life-boat and other boats in rough weather, and for ships' use in cases of loss of anchorage. (*to be fired from a mortar.*)	2534	7th Sept. 1867	John Banting Rogers.
Method of and materials for manufacturing ammunition boxes, pontoons, baggage and other waggons and carriages, and various equipments for military, naval and civil purposes. (*shell and shot boxes.*)	2630	19th Sept. 1867	Thomas Charles Clarkson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SHOT, &c.—*continued.*			
Projectiles and their manufacture - - -	2695	25th Sept. 1867	John Clowes Bayley. Daniel Campbell.
Projectiles - - - - - (*Communicated by Eugène Pertuiset, Auguste Mundel and Jean Etienne Armide de Fléron.*)	2837	9th Oct. 1867	John Henry Johnson.
Apparatus or machinery for loading heavy ordnance with balls, shells or other projectiles. (*see* "FIRE-ARMS.") (*Communicated by James Buchanan Eads.*)	2887	14th Oct. 1867	William Robert Lake.
Improvements in fire-arms and ordnance and in projectiles therefor.	3039	28th Oct. 1867	The Honble. Herbert George Phillip Meade.
Improvements in ordnance and in projectiles used therewith, as also in the processes employed in their manufacture.	3507	10th Dec. 1867	William Palliser.
Improvements in guns, projectiles and cartridges, and in the construction of the same.	3562	14th Dec. 1867	George Clark.
Improvements in the mode of and machinery for making shot and shells for ordnance. (*Communicated by John Blake Tarr.*)	3688	28th Dec. 1867	Alfred Vincent Newton.
SHOW-CASES, EXHIBITING GOODS FOR SALE, SHOP SAFES, FRONTS AND COUNTERS; NAME PLATES, STREET NAME INDICATORS.			
Ornamenting, printing, cutting, creasing, bending. embossing and manufacturing articles from wood and other materials. (*show boards.*)	155	22nd Jan. 1867	Edward Tomlinson.
Rising or adjustable brackets for supporting shelves and rods in shop windows, and for other purposes - - - - -	618	5th March 1867	Edward Wells. William Pryor.
Apparatus for exhibiting cloths and fabrics -	811	20th March 1867	George Chambers.
Making up tapes and other narrow fabrics -	1242	29th April 1867	Robert Smith. Marcus Brown Westhead.
Apparatus for punching, cutting and embossing - (*name plates, number plates, &c.*)	1702	10th June 1867	Andrew Linmere Dowie. Robert McIntyre.
Boxes, drawers and other like receptacles - - (*exhibiting articles for sale.*)	1715	11th June 1867	George Philip Hill.
Means of indicating numbers and names on doors of private houses - - - -	2062	13th July 1867	William Drury. Charles Westrup.
Arranging tapes or other narrow fabrics in boxes or other receptacles for use - - -	3202	12th Nov. 1867	Marcus Brown Westhead. Robert Smith.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SIFTING, SORTING, SEPARATING, SPRINKLING.			
Machines for separating foreign seeds and other impurities from wheat, other grain or seeds. (*Communicated by David Monroe Childs.*)	142	19th Jan. 1867	Augustus Bryant Childs.
Cinder and other shovels - - - - (*for sifting.*)	419	15th Feb. 1867	Richard George.
Machinery for conveying, screening and loading coke and other materials - - -	620	6th March 1867	John Robert Breckon. Robert Dixon.
Improvements in apparatus applicable to dry closets, for disinfecting and deodorising and preparing manure, parts of which are applicable to the separating of cinders from ashes.	729	13th March 1867	James Conyers Morrell.
Machinery for manufacturing flour - - (*Communicated by John Brown, Alexander Hart, Allen Battey Ralph, James Hobart Cutler and Dexter Neuton Knight.*)	838	22nd March 1867	George Tomlinson Bousfield.
Improved apparatus for manufacturing and assorting semolina, and reducing the same to flour.	917	28th March 1867	Gustav Adolph Buchholz.
Improvements in apparatus for separating substances according to their nature or quality, particularly applicable to corn and seeds -	1125	16th April 1867	Edmund Brook Nunn. Joseph Phillips Nunn.
Screens or dressing machines for screening or sifting corn, seeds or other substances.	1134	17th April 1867	Robert Boby.
Revolving screens for screening coal and other materials.	1282	2nd May 1867	Charles Dutton.
Machinery for drawing and dressing seeds - -	1344	7th May 1867	Charles Burrell.
An improved machine for scouring or cleaning grain. (*Communicated by Peter T. Elting.*)	1346	7th May 1867	William Robert Lake.
Improvements in machinery or apparatus for separating liquids or moisture from substances, and also for revivifying and cooling animal charcoal and other substances, and for treating sugar.	1707	10th June 1867	William Orr.
Improvements in thrashing machines and other machines for dressing and separating grain, and in rotary screens to be used therein and for other purposes - - - -	1709	11th June 1867	Richard Hornsby. John Bonnall. Henry Shield.
An improved process of decorticating, crushing and treating dry peas.	2127	20th July 1867	Alexandre Sezille.
Means or apparatus for sorting, screening and classifying corn, seeds, flour or other substances which it may be desirable to classify. (*Communicated by Edmund Van Schepdael and Baptiste Bourgès.*)	2272	6th Aug. 1867	Hunter Henry Murdoch.
Certain improvements in spades and shovels -	2380	10th Aug. 1867	Francis Parkes. George Parkes.
Improvements in separating yeast from liquid matters and in apparatus to be used therefor. (*see* "DRYING.")	2652	20th Sept. 1867	William Hall.
An improved method of and apparatus for drying, cleaning and separating grain.	2659	21st Sept. 1867	John Stonehouse Williamson.
Separating pyrites, shale and other impurities from coal.	2678	23rd Sept. 1867	James Hargreaves.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SIFTING, &C.—*continued.*			
Cinder sifters	2709	26th Sept. 1867	John Alexander Smyth.
Centrifugal machines for separating liquid from solid matter. (*Communicated by David M^c^Colley Weston.*)	3041	28th Oct. 1867	William Robert Lake.
Improvements in cleaning cotton and cotton seeds, and in the machinery or apparatus employed therein. (*Communicated by Felix Figon.*)	3048	29th Oct. 1867	John Henry Johnson.
Improvements in the process of and in apparatus employed in treating and separating minerals, earths and other substances when ground or pulverized.	3248	16th Nov. 1867	Israel Swindells.
Machinery or apparatus for separating and cleaning seeds	3373	28th Nov. 1867	Thomas Rose. Robert Emerson Gibson.
An improved sprinkler for powdered substances (*Communicated by George Jones.*)	3374	28th Nov. 1867	Edward Thomas Hughes.
An improved mode of treating cotton seed to obtain oil therefrom, and in machinery employed therein (*sifting out the meal.*)	3388	29th Nov. 1867	Thomas Rose. Robert Emerson Gibson.
SIGNALS, ALARMS, COMMUNICATING APPARATUS, CONVEYING SOUND.			
Apparatus for locking the levers or handles for working railway switches and signals	29	4th Jan. 1867	Charles I'Anson. Alfred Kitching.
Apparatus used when probing for balls or projectiles (*with alarm attached.*)	98	14th Jan. 1867	Sylvan de Wilde.
Signals on railways	140	19th Jan. 1867	Joseph Grant. Job Herbert.
Improved means of conveying sound from preachers or lecturers to the congregation or audience.	160	22nd Jan. 1867	Frederick Charles Rein.
An improved method of and apparatus for signalling between passengers, guards and drivers of railway trains.	304	4th Feb. 1867	William James Baker.
Machinery or apparatus for opening, closing, locking and unlocking cart and other gates on railway level crossings, together with signals in connection therewith.	369	9th Feb. 1867	George Daws.
An improved railroad switch indicator (*Communicated by Thomas Shepard Hall.*)	453	19th Feb. 1867	Alfred Vincent Newton.
Improved apparatus for fastening or connecting the wires employed for transmitting electric signals on railway trains.	488	22nd Feb. 1867	Alice Isabel Lucan Gordon.
Improvements in signalling on railways and in apparatus connected therewith.	518	26th Feb. 1867	George Daws.
An alarum for the use of railways	523	26th Feb. 1867	Edward Funnell.
Certain improvements in lamps (*signal lamps.*)	525	26th Feb. 1867	George Young.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SIGNALS, &c.—*continued.*			
Apparatus for working and governing, controlling or regulating railway signals, points and switches - - - - -	538	27th Feb. 1867	John Saxby. John Stinson Farmer.
Signal and switch apparatus for railways - -	547	27th Feb. 1867	James Livesey. John Edwards. William Jeffreys.
Improvements in signalling apparatus and in the liquid to be used therewith, and which liquid not being subject to congelation may be used as a vehicle for communicating power - -	730	13th March 1867	William Esplen. James John Briggs Bland.
Mechanical contrivances and apparatus employed for locking and for actuating or setting in motion the locking and interlocking gear used or intended to be used for regulating or governing the action and movement of railway points and signals in relation to each other.	870	26th March 1867	John Saxby.
Apparatus for communicating from passengers to guards in trains, and for indicating from which carriage or compartment a communication has been made.	879	26th March 1867	John Sanderson Morton.
Improved means of communication between a railway station and the guard or other person in charge of a train at a distance, or between the guards of two trains on the same line - -	905	28th March 1867	John Arnold. George Daniel.
A new or improved optical telegraph - - (*Communicated by Alexandre Schpakofsky.*)	908	28th March 1867	Charles Denton Abel.
Machinery or apparatus for actuating and controlling railway points and signals.	927	29th March 1867	Walter Easterbrook.
Improvements in the manufacture and construction of fog or alarm signals for use on railways, and in apparatus for placing such signals on the rail.	950	30th March 1867	Simeon Lilley.
Machinery or apparatus for actuating fog or detonating signals on railways - - -	959	30th March 1867	James Randall. Charles Adams.
An improved method of and apparatus for communicating between the several parts of railway trains.	1021	5th April 1867	James Graham Tatters.
An improved method of and apparatus for signalling and giving alarm on railways.	1032	6th April 1867	Joseph Woods.
Improvements in apparatus for regulating and transmitting electric currents, more especially designed for use in connection with telegraphic recording instruments for long submarine lines.	1053	8th April 1867	George Little.
Improvements in the mechanism or apparatus employed for locking, actuating and setting in motion railway points and signals, also in the apparatus for regulating or governing the action and movement of such points and signals in relation to each other.	1221	27th April 1867	John Cariss.
Signalling on railways - - - -	1230	27th April 1867	Reginald Foster Chapman.
An improved alarm apparatus for indicating and registering the rise of water in the holds of ships or vessels. (*Communicated by Charles Benjamin Norton.*)	1239	29th April 1867	Marc Antoine François Mennons.
A new or improved system of and apparatus for administrative telegraphy. (*Communicated by Adolphe Bergmüller.*)	1279	2nd May 1867	Charles Denton Abel.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SIGNALS, &c.—*continued.*			
Improved apparatus for giving alarm in cases of fire.	1302	3rd May 1867	Thomas Crossley.
Improvements in magneto-electric signal lights and in apparatus connected therewith. (*Communicated by Auguste Berlioz.*)	1308	4th May 1867	John Henry Johnson.
Improvements in telegraph posts, also applicable to ships' masts and posts or supports for other purposes - - - - - (*signal posts.*)	1319	6th May 1867	Paul Haenlein. Joseph Fisher. Rowland George Fisher.
Improvements in machinery or apparatus for communicating between passengers in railway carriages and the guard and driver of railway trains, and improved self-acting breaks applicable also to other carriages or vehicles.	1379	9th May 1867	Ratcliffe Andrew.
Apparatus for signalling between passengers, guards and engine drivers upon railways.	1422	14th May 1867	Alexander Hamilton Colles.
Apparatus for communicating between the passengers, guards and engine drivers of a railway train.	1471	17th May 1867	Josiah Latimer Clark.
An improved compound lever for working railway points and signals, applicable also to other purposes.	1579	28th May 1867	Thomas Frederick Cashin.
Galvanometers for receiving signals through submarine and other electric-telegraph lines, and for testing them.	1583	29th May 1867	David Tunks.
Night and fog signal apparatus for preventing accidents on railways.	1651	5th June 1867	Jules Gaudet.
Means or apparatus for signalling between different parts of railway trains.	1672	7th June 1867	Joseph Offord.
Apparatus to be used in signalling in and from railway trains.	1736	13th June 1867	Samuel Hancock.
Apparatus for communicating between the guard and driver, and passengers and guard of a railway train.	1737	14th June 1867	William King.
Electric telegraphs - - - - (*apparatus for ringing bells.*)	1755	15th June 1867	Cornelius Varley. Samuel Alfred Varley.
Improvements in stop-blocks and buffer stops to be used upon railways, part of which improvements is also applicable to the working of points on railways. (*and working signals.*)	1793	19th June 1867	Henry Columbus Hurry.
An improved arrangement of ships' signal lights -	1840	24th June 1867	Robert Capper. George Read.
Railway signals, point apparatus and lamps -	1867	27th June 1867	Joseph Grindley Rowe.
Means of communicating intelligence between parts of railway trains.	1878	27th June 1867	Charles James Pownall.
Apparatus for working railway switches and signals.	1959	4th July 1867	Francis Brady.
Improvements in signalling apparatus for general purposes, but which is more particularly applicable for use on board navigable vessels -	1993	8th July 1867	John Johnson. Edward Shinn. Grindle Ragg.
Apparatus for facilitating communication between the guard and the passengers in a railway train.	2080	15th July 1867	James Thomas Skinner.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SIGNALS, &c.—*continued.*			
Mechanical contrivances and apparatus employed for locking and for actuating or setting in motion the locking and interlocking gear used or intended to be used for regulating or governing the action and movement of railway points and signals in relation to each other.	2119	20th July 1867	John Saxby.
Apparatus for preventing accidents at junctions, crossings and sidings of railways.	2123	20th July 1867	Charles Frederick Whitworth.
Machinery or apparatus for actuating, setting in motion, locking, interlocking and controlling railway points and signals.	2143	23rd July 1867	Walter Easterbrook.
Apparatus for facilitating communications between passengers, guards and drivers of railway trains	2156	25th July 1867	Samuel Turton. George Holcroft.
Improvements in signalling at sea and in apparatus to be employed for such purpose.	2165	25th July 1867	Thomas Michael Almond.
Signalling upon railway trains, parts of which apparatus are applicable to electric telegraphs generally - - - - -	2207	30th July 1867	Samuel Manley Martin. Samuel Alfred Varley.
Improvements in the construction of locking apparatus for governing the movement of railway points and signals, and in the mode or method of applying, combining and actuating such apparatus.	2217	31st July 1867	John Saxby.
Communicating or signalling in and with railway trains.	2222	1st Aug. 1867	David Dunne Kyle.
Machinery or apparatus for actuating and locking railway points and signals.	2234	2nd Aug. 1867	John Edwards.
Signalling and indicating apparatus - -	2468	29th Aug. 1867	Arthur McNutt Wier. Marshall Arthur Wier.
Brakes for railway trains, parts of which can be used or applied for signalling on trains in motion.	2483	2nd Sept. 1867	Richard Watson.
Improvements in apparatus for communicating between passengers and guards of railway trains, and between guards and engine drivers of railway trains.	2617	17th Sept. 1867	Samuel Cornwallis Amesbury, M.R.C.S., F.R.C.S., L.R.C.P.
An improved alarm apparatus - - -	2651	20th Sept. 1867	Edward Henry Newby.
Production of light and heat for signalling and other purposes - - - - -	2691	24th Sept. 1867	Philip Howard Colomb. Francis John Bolton.
Improved apparatus for transmitting signals in railway trains - - - -	2730	27th Sept. 1867	James Cocker. Frederick Stivens Cocker.
Apparatus to be used for boiling eggs and for like purposes. (*giving notice.*)	2750	30th Sept. 1867	Ira Dimock.
Point or switch indicators used on railways -	2795	4th Oct. 1867	William Smith.
Apparatus for transmitting alarm signals and applying brake power in railway trains. (*Communicated by Jean Baptiste Jolly.*)	2889	14th Oct. 1867	Marc Antoine François Mennons.
Improvements in telegraphic communication by pneumatic means, and in the apparatus employed therein - - - - -	2900	16th Oct. 1867	Alexander Prince. Alexander Charles Montague Prince.
Means or mode of signalling upon railways -	2908	17th Oct. 1867	Marmaduke Wilkin. John Clark.
Construction of letter boxes, pillar letter boxes and money and other such like boxes. (*attaching an alarm.*)	2948	19th Oct. 1867	Maurice William Shove.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SIGNALS, &c.—*continued.*			
Improvements in the permanent way of and in signalling on railways.	2955	21st Oct. 1867	John Hunter.
Improvements in apparatus for working and governing the action of railway points and signals, a part of which is applicable for other purposes.	3128	6th Nov. 1867	Thomas Frederick Cashin.
Improvements in omnibuses and similar vehicles, and in apparatus in connection therewith, part of which improvements are also applicable to railway and other carriages. (*speaking tubes.*)	3178	11th Nov. 1867	William Thompson.
Improvements in means of communication applied to railway carriages, and in apparatus for making signals, which improvements are in part applicable to other purposes.	3284	20th Nov. 1867	Hugh Hughes Lloyd.
Telegraphic apparatus - - - - (*fire alarms.*) (*Communicated by John Murray Fairchild and Joseph Kidder Bundy.*)	3317	23rd Nov. 1867	Edward Thomas Hughes.
Matches for lighting cigars and for other purposes - (*for lighting signals.*)	3336	26th Nov. 1867	Robert Michael Letchford.
Apparatus for signalling at sea - - -	3391	29th Nov. 1867	Herbert Sanderson Cowan.
Globes and glasses for the transmission of artificial and other light. (*for signal lamps.*)	3404	30th Nov. 1867	Samuel Edward Tyrrell Steane.
Improvements in breaks for railway and other carriages, and in signalling and other apparatus in connection therewith, which improvements are also partly applicable to other purposes.	3597	18th Dec. 1867	Thomas Comfield the younger.
A self-acting fire alarm and extinguisher - -	3647	23rd Dec. 1867	Charles John Adams.
Improvements in the application of electricity to clocks, watches and other time-keepers, and in the apparatus employed therein. (*Communicated by Theodore Auguste Marie Sortais.*)	3684	27th Dec. 1867	Clinton Edgcumbe Brooman.
A mechanical tell-tale alarm pointing and reporting clock.	3693	28th Dec. 1867	Lewis Hasluck.
SIZING, WARPING, BEAMING AND PREPARING YARNS FOR WEAVING.			
Improved apparatus for regulating, controlling and for varying the speed of shafts and machinery. (*tape sizing machines.*)	51	8th Jan. 1867	Robert Robinson.
Apparatus for drying yarn - - - (*Communicated by Hugh Whitehill.*)	324	5th Feb. 1867	John Garrett Tongue.
Starching or stiffening yarns, threads, woven fabrics and tissues. (*Communicated by John Gaspard Meyer-Rauschenbach.*)	340	6th Feb. 1867	Frederik Rosenaur.
Machinery for sizing, dressing and beaming yarn and thread - - - -	368	9th Feb. 1867	Richard Haworth. John Wellington Welch.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SIZING, &c.—*continued.*			
Chain beaming apparatus - - - -	420	15th Feb. 1867	John Pinkerton Kerr. William McGee.
Preparation of threads and the manufacture of fabrics from the threads so prepared. (*Communicated by Stanislas Vigoureux.*)	509	23rd Feb. 1867	Clinton Edgcumbe Brooman.
Certain improvements in or applicable to sizing and dressing machines.	673	9th March 1867	William Scowcroft Lowe.
Machinery or apparatus for warping or beaming yarns or threads.	1232	29th April 1867	Thomas Watson.
Machinery for winding cops and warping from cops	1391	10th May 1867	John Combe.
Improved arrangements and apparatus for wetting and drying wefts or yarns to prepare them for weaving - - - - -	1431	15th May 1867	Clarance Brazil. Robert Grime.
Improvements in or applicable to machines for sizing yarns or threads preparatory to weaving, and also to slubbing and roving frames and to other machines - - - - -	1744	15th June 1867	James Fletcher. William Carr.
Improvements in expanding and contracting combs or wraiths for warping, beaming, dressing and other frames, and in machinery or apparatus connected therewith.	1909	29th June 1867	James Conlong.
Improved means and apparatus for preparing size for warps or other purposes.	2374	19th Aug. 1867	Thomas Tunstill.
An improved compound or composition to be employed in sizing and finishing woven fabrics and yarns.	2490	3rd Sept. 1867	Alfred Leigh.
Improvements in warping and in machinery or apparatus employed therein - - -	3099	4th Nov. 1867	James Clarke, junior. Thomas Holt.
Improvements in joining warp ends and in apparatus employed therein - - -	3177	9th Nov. 1867	John Howard Worthington Biggs. Arthur Worthington Biggs.
Improvements in the manufacture of carpets, and in warping and preparing warps for the same, and in the machinery or apparatus to be employed therefor - - - - -	3394	29th Nov. 1867	Archibald Turner. William Edward Newton.
Apparatus to be used in joining warp ends, which apparatus may also be otherwise employed.	3426	2nd Dec. 1867	John Howard Worthington Biggs.
An improved mode of waxing warps in the process of weaving - - - - -	3447	4th Dec. 1867	Thomas Stephenson. GeorgeBalmeStephenson Benjamin Stephenson.
Machinery for sizing cotton and other yarns -	3481	7th Dec. 1867	Clarance Brazil.
Apparatus for boiling size - - - (*for sizing warps.*)	3627	21st Dec. 1867	James Kenyon.
Improvements in steaming certain yarns and in apparatus employed therein - - -	3669	26th Dec. 1867	Nathaniel Greenhalgh. William Shaw. James Mallison.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SMOKE PREVENTION; BURNING AND CONDENSING SMOKE; SAVING FUEL.			
Apparatus for evaporating and concentrating cane juice and other juices and liquids. (*saving fuel.*) (*Communicated by George Brocklehurst.*)	5	1st Jan. 1867	Michael Henry.
Machinery or apparatus for the prevention of smoke from furnaces used for steam-boilers and other similar purposes.	19	3rd Jan. 1867	Joseph Knowles Broadbent.
Improvements in furnaces and in the manufacture of fire bars for the same.	75	11th Jan. 1867	Isaiah Kendrick.
Improvements in bakers' and other ovens, and also in scrap and other furnaces.	80	11th Jan. 1867	John Tomlinson.
Means and apparatus for condensing smoke and vapours.	101	15th Jan. 1867	Joseph MatthewsHocking.
An improved construction of steam generator - (*saving fuel.*) (*Communicated by George Gould.*)	138	19th Jan. 1867	Alfred Vincent Newton.
Apparatus for consuming smoke, promoting combustion, and feeding furnaces with fuel.	158	22nd Jan. 1867	William Arena Martin.
Improvements in chimney tops for the prevention of smoky chimneys.	183	24th Jan. 1867	Daniel Sutcliffe Chater.
Puddling and other furnaces for melting, boiling or heating iron - - - - - -	210	26th Jan. 1867	John Allcock Jones. Richard Howson.
Improvements in the heating of malt kilns and other apparatus of a similar character, and the warming of the interiors of churches and other large buildings, which invention is also applicable to causing the consumption of smoke from open fire-places.	249	30th Jan. 1867	Thomas Prideaux.
Fire-grates and furnaces - - - - -	270	31st Jan. 1867	Archibald Craig.
Chimney-tops - - - - - -	275	1st Feb. 1867	John Alexander Murray.
Construction and arrangement of kilns and ovens -	290	2nd Feb. 1867	John Gilbert Robinson.
Improvements in furnaces or fire-places for the prevention of smoke.	297	2nd Feb. 1867	John Stubbs.
Improvements in steam-boiler, saltpan and other furnaces or fire-places, for the better combustion of fuel.	354	7th Feb. 1867	Herman Eugene Falk.
Propellers for ships, boats and other vessels - (*saving fuel.*) (*Communicated by Auguste Arban the elder and the Marquis Marie Joseph Antoine Ernest De Lagrange.*)	362	8th Feb. 1867	John Henry Johnson.
Certain improvements in steam-boilers or generators (*Communicated by John Lochhead and Charles Arthur Mathieu.*)	402	13th Feb. 1867	William Edward Gedge.
An improved method of consuming smoke in furnaces.	454	20th Feb. 1867	William Harrison.
Manufacture of certain metallic alloys - - (*saving fuel.*)	505	23rd Feb. 1867	Philip Albert Muntz.
Apparatus for boiling fats, oils and bones, whereby to neutralize and avoid the escape of noxious gases.	515	25th Feb. 1867	William Barratt.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SMOKE PREVENTION, &c.—*continued.*			
Furnaces for steam-boilers, boiling pans and other similar purposes	517	26th Feb. 1867	John Addy Hopkinson. Joseph Hopkinson the younger.
Steam-boiler and other furnaces	578	1st March 1867	Benjamin Sheard.
Improvements in means or apparatus for generating, superheating and condensing steam, and heating or boiling water or other liquids, parts of which are applicable to other purposes	601	4th March 1867	James Marchent. John Parker.
Fire ranges for dwelling houses	635	7th March 1867	Edward Knowles Heaps. Thomas Parkin Moorwood.
Improvements in baking or hardening vulcanite or dental india-rubber and other similar compounds and preparations, and in apparatus employed for such purpose.	688	11th March 1867	Frederick Ryding.
Improvements in supplying heated air to furnaces and fires, and in apparatus connected therewith, which apparatus is also applicable to burning smoke	741	14th March 1867	William Hamer. Joseph Davies.
Boilers and apparatus for generating steam and evaporating fluids. (*increasing consumption of smoke.*)	757	16th March 1867	Thomas Dunn.
Certain improvements in apparatus applicable for the prevention of smoke.	762	16th March 1867	John Grundy.
Improvements applicable to steam-boilers and engines, for economizing fuel in the generation of steam, and in the apparatus connected therewith.	783	19th March 1867	John Robinson.
Furnaces for evaporating brine and for other heating purposes	830	22nd March 1867	George Cross. Richard Evans.
Certain improvements in furnaces or fireplaces	867	26th March 1867	Thomas Wrigley.
Certain improvements in fire bars to be employed in furnaces.	906	28th March 1867	John Grundy.
Improvements in means or apparatus employed in the cure of smokey chimneys, and in ventilating buildings and other places	941	30th March 1867	Richard Canham. William Kreut.
Certain improvements in the method of purifying smoke and in apparatus connected therewith. (*Communicated by Wolf Maurice.*)	1058	9th April 1867	John Lacey Davies.
Construction of register or other open fire-grates (*saving fuel.*)	1061	9th April 1867	Thomas Redmayne. John Sibrey.
Improvements in fire-bars, and in the manufacture of the iron to be used in the construction thereof, the iron so manufactured being applicable also to other purposes.	1070	10th April 1867	William Colborne Cambridge.
Furnaces of steam and other boilers	1076	11th April 1867	Samuel Barlow. Thomas Edmeston.
An improved method of consuming smoke in furnaces.	1153	20th April 1867	William Harrison.
Improvements applicable to kitchen ranges, part of which improvements is also applicable for the prevention of down draught in other fire-places.	1305	4th May 1867	Robert Russell.
A self-acting damper in connection with steam-boilers (*saving fuel.*)	1325	6th May 1867	William Schofield. Edmund Smith.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SMOKE PREVENTION, &c.—*continued.*			
Rotary engines - - - - (*saving fuel.*)	1398	11th May 1867	George Fitzjames Russell.
Improvements in producing and increasing combustion in blast and other furnaces, also for generating steam and for other similar or analogous purposes.	1454	16th May 1867	John Martin Stanley.
Arrangement and construction of furnaces for steam-boilers and various other useful purposes. (*Communicated by Emmanuel Minary.*)	1495	20th May 1867	John Garrett Tongue.
Improvements in furnaces for heating the air stoves of blast furnaces and for other purposes, and in utilizing the products of combustion from such stoves. (*economising fuel.*)	1517	22nd May 1867	Daniel Adamson.
Improvements in the production of motive-power and in the apparatus connected therewith. (*saving fuel.*) (*Communicated by Jacques Belou.*)	1575	28th May 1867	Henri Adrien Bonneville.
Furnace apparatus of steam-boilers - -	1592	29th May 1867	Robert Newton.
A new means for procuring the more perfect combustion in the burning of fuel.	1610	30th May 1867	Tony Petitjean.
Improvements in machinery or apparatus for separating liquids or moisture from substances, and also for revivifying and cooling animal charcoal and other substances, and for treating sugar. (*saving fuel.*)	1707	10th June 1867	William Orr.
Furnaces for steam-boilers and other uses - - (*economising fuel.*)	1735	13th June 1867	John Glover.
Improvements in furnaces for consuming smoke -	1749	15th June 1867	Charles Sadler.
Improvements in furnaces for consuming smoke, applicable to steam-boilers and other furnaces.	1814	21st June 1867	William Bellhouse.
Hot-air ovens for baking bread, biscuits, pastry, cooking, drying or desiccating flour and other materials. (*saving fuel.*)	1853	25th June 1867	Henry Veillon.
Means of consuming smoke in furnaces and other fire-places.	1854	25th June 1867	Gavin Alston.
Means of consuming smoke in furnaces - -	1861	26th June 1867	Richard Pannell Forlong.
Steam-engines - - - - - (*saving fuel.*)	1865	26th June 1867	Alexander Caesar Frederick Franklin.
Lamps for burning petroleum, shale and other mineral oils.	1910	29th June 1867	Charles Petit.
Self-feeding smokeless furnaces - - -	1955	4th July 1867	Thomas Vicars the elder. Thomas Vicars the younger. James Smith.
Arrangement of the flues of certain boilers for generating steam. (*saving fuel.*)	2009	9th July 1867	James Credland.
An improved smoke-consuming apparatus -	2043	12th July 1867	Jean Baptiste Eloyne Grand Perrin.
Improvements in or applicable to steam-boiler and other furnaces, for the combustion or prevention of smoke and economizing fuel.	2048	12th July 1867	Jonathan Kellett.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SMOKE PREVENTION, &c.—*continued.*			
Steam-boilers and furnaces - - -	2049	12th July 1867	George S inclair.
An improved arrangement or construction of furnaces to be used for preventing smoke and effecting economy of fuel.	2050	12th July 1867	Charles Titus Higginbotham.
Construction of furnaces employed in the manufacture of glass.	2075	15th July 1867	Francis Dixon Nuttall.
Improved means and apparatus for "malting" or drying barley, part of which means and apparatus is also applicable to other purposes - (*and saving fuel.*)	2095	17th July 1867	James Schofield. Joshua Caleb Dawson.
Consuming smoke, economising fuel and generating steam.	2099	17th July 1867	Samuel Cunliffe Lister.
Improvements in open fire-places and stove-grates, for the purpose of economising fuel and securing a more perfect combustion.	2154	24th July 1867	Thomas Prideaux.
Means and apparatus for condensing noxious smoke and vapours.	2212	31st July 1867	Joseph Matthews Hocking.
Steam-boiler and other furnaces - - -	2266	5th Aug. 1867	John Lockwood.
Furnaces for steam-boilers and other purposes -	2268	6th Aug. 1867	John Bolland.
Kitchen ranges - - - -	2274	6th Aug. 1867	Moses Jones.
Apparatus to be applied to chimney tops - -	2297	9th Aug. 1867	Caroline Hohgrefe.
Puddling and other furnaces employed for melting, boiling or heating iron - - - -	2337	14th Aug. 1867	John Allcock Jones. Richard Howson. John Gjers.
Apparatus employed in the heating of bakers' ovens.	2348	15th Aug. 1867	John Cosgrave.
Construction of steam-boilers and apparatus connected therewith.	2389	21st Aug. 1867	Joshua Murgatroyd.
Steam-engines - - - - - (*saving fuel.*)	2535	7th Sept. 1867	James Armstrong. Edwin Eccleston.
An improved fuel economizer - - -	2584	12th Sept. 1867	James Perren.
Moveable fire bars - - - -	2689	24th Sept. 1867	John Lewis. William Huntington. William Anyon.
A new or improved method and apparatus for converting the gaseous products of combustion into combustible gases. (*Communicated by Nicolas Lebedeff.*)	2694	25th Sept. 1867	Charles Denton Abel.
Lamps - - - - - - (*preventing noxious fumes.*)	2741	28th Sept. 1867	Ellis Lever.
Improvements in furnaces, fire-places and fire-bars, for the consumption of smoke and gases arising from products, and the non-consumption of fire-bars.	2757	1st Oct. 1867	Thomas Bird.
Improvements in and applicable to ovens, boilers, and other apparatus in which heat is employed. (*saving fuel.*) (*Communicated by Alfred Charles Joly de Marval.*)	2780	3rd Oct. 1867	William Spence.
An improved apparatus for the prevention or consumption of smoke in the furnaces and flues of steam-boilers - - - - -	2825	8th Oct. 1867	John Dean. Thomas Turton.
Certain improvements in the method of consuming smoke and in apparatus connected therewith.	2836	9th Oct. 1867	John Barker.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SMOKE PREVENTION, &c.—*continued.*			
Improvements in smoke-consuming apparatus for steam-boiler and other furnaces, and in machinery for manufacturing parts of the same.	2871	12th Oct. 1867	Jean Baptiste Pierre Alfred Thierry.
Steam-boilers and furnaces - - -	2920	17th Oct. 1867	William Tredgold. James McNeil.
Steam-boilers - - - - - -	2929	18th Oct. 1867	James Seward. Henry Smith.
Improved means and apparatus for economizing fuel and consuming smoke in steam-boilers and furnaces - - - - - -	2987	24th Oct. 1867	John Ellison. Joseph Stirk.
Kilns for burning pipes, tiles, bricks, pots and earthenware.	2991	24th Oct. 1867	Henry Adcock.
Improvements in the mode of and apparatus for burning the gases arising from the distillation of liquid hydro-carbons, and also in economizing fuel by the said process - - - -	3014	26th Oct. 1867	George Dorsett. Edward Dorsett. John Bennington Blythe.
Furnaces for steam-boilers and other uses - (*preventing smoke.*)	3035	28th Oct. 1867	John Glover.
Tubular boilers - - - - - (*saving fuel.*)	3094	4th Nov. 1867	Charles Riley.
Apparatus for smoke consuming in steam-boiler and other furnaces - - - - -	3139	7th Nov. 1867	Thomas Rothwell Bardsley. William Blackshaw.
Gas-lamps - - - - - (*smoke condensers.*)	3172	9th Nov. 1867	Thomas Wells Ingram. Edward Curtis Kemp.
Furnaces or heating apparatus - - - (*Communicated by Eugene Alexandre Frederic Goguel.*)	3200	12th Nov. 1867	Clinton Edgcumbe Brooman.
Tubular boilers - - - - - (*Communicated by Louis Barret.*)	3212	13th Nov. 1867	Alexander Melville Clark.
Improvements in evaporating apparatus and in utilizing the steam derivable from such apparatus. (*saving fuel.*)	3277	19th Nov. 1867	William Anderson.
Improvements in smoke-consuming apparatus, parts of which improvements are applicable to other purposes.	3289	20th Nov. 1867	Joseph Staincliffe.
Cowls or guards for chimney and other like shafts -	3300	21st Nov. 1867	Walter Blundell.
Means of and apparatus for consuming smoke and economizing fuel in furnaces of steam-boilers and other furnaces.	3314	23rd Nov. 1867	George Douglas Hughes.
An improved arrangement or construction of furnaces to be used for preventing smoke and effecting economy of fuel.	3348	26th Nov. 1867	Charles Titus Higginbotham.
Portable and other steam-engines and boilers - (*saving fuel.*)	3439	3rd Dec. 1867	William Brown. Charles Neale May.
Improvements in steam-boiler furnaces and in apparatus connected therewith.	3459	5th Dec. 1867	Daniel Smith.
Improvements in annealing furnaces and in apparatus to be employed therein, parts of which improvements may be applied to certain other descriptions of furnaces and fires - -	3467	5th Dec. 1867	Matthew Tildesley. James Bird.
Tubular steam-boilers - - - -	3514	11th Dec. 1867	William John Fraser.
Gas retort ovens and furnaces - - (*Communicated by John Olof Wallin.*)	3554	14th Dec. 1867	Henry Atkinson.
Improvements in feeding furnaces for prevention of smoke and economizing fuel.	3565	14th Dec. 1867	Ollive Hollingworth.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SMOKE PREVENTION, &c.—*continued.*			
Means of and apparatus for obtaining and applying hydrogen gas to the furnaces of steam-engines, boilers, and kilns for the manufacture of bricks and lime.	3580	16th Dec. 1867	James Standfield.
Improvements in glass bottle house pot carriages and implements used in setting glass bottle house pots, which invention admits of improvements in the construction of furnaces for melting bottle or other glass in open pots. (*saving fuel.*)	3613	19th Dec. 1867	Edgar Breffit.
Apparatus for consuming or preventing the formation of smoke in steam-boiler and other furnaces - - - - -	3700	30th Dec. 1867	Walter Kendrick. Job Wooldridge.
Improvements in furnaces for smelting glass or the materials employed therein, and for consuming smoke.	3702	30th Dec. 1867	James Davison.
SOAP.			
Manufacture of soap - - - - (*Communicated by Adolphe Philippe and Gustave Fortier.*)	241	29th Jan. 1867	Clinton Edgcumbe Brooman.
Preparation of oils for illuminating, lubricating and other purposes for which they may be applicable - - - - - (*for making soap.*)	344	7th Feb. 1867	George Edward Pain. Charles Corroy.
Manufacture and ornamentation of anhydrous rectified and double-faced toilet soaps. (*Communicated by Pierre Bonaventure Mougeot.*)	492	22nd Feb. 1867	William Clark.
Preparation of soap adapted more especially for the scouring of wool and woollen yarns.	752	15th March 1867	George Smith.
A new and improved kind of soap - - (*Communicated by Emeric de Werchin.*)	1046	8th April 1867	Henri Adrien Bonneville.
Improvements in the treatment of fibrous materials and in apparatus to be used in such treatment. (*use of an improved soap.*)	1207	26th April 1867	John Watson Burton.
An improved washing powder - - - (*Communicated by Louis Lacalm and Barthelemy Adolphe Guyot.*)	1412	13th May 1867	Henri Adrien Bonneville.
An improved method of guaging and cutting soap	1866	27th June 1867	Edwin Whele.
Treatment and purification of oils - - - (*and obtaining common soaps.*) (*Communicated by Felix Asselin.*)	2100	17th July 1867	John Henry Johnson.
Apparatus for evaporating or recovering lees -	2327	13th Aug. 1867	Alexander Swan.
Screw presses and apparatus for pressing and moulding soap, or for pressing, moulding, packing or stamping other materials.	2433	24th Aug. 1867	Frederick John Cleaver.
An improved manufacture of soap - - (*Communicated by Achille Louis Sabather, Alfred Bizet and Louis François Joseph Lecat.*)	2608	16th Sept. 1867	Philibert Dumont.
An improvement in the manufacture of soap -	3659	24th Dec. 1867	George Layton.
Means or apparatus for cutting soap - -	3691	28th Dec. 1867	Campbell Morfit.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SOWING SEEDS AND DISTRIBUTING MANURE.			
Improvements in cultivating land and in apparatus employed therein. (*depositing seed.*)	862	25th March 1867	Robert Higgins.
Liquid manure or water drills - - -	1104	13th April 1867	Charles George Gillyatt.
A new or improved combined apparatus for sowing seeds, hoeing, raking and other horticultural purposes.	1452	16th May 1867	James Griffiths.
A combined seeder, cultivator and roller - - (*Communicated by James Page Long and Peter Low.*)	1571	28th May 1867	Edward Thomas Hughes.
Application of sewage and other liquid manures to land.	2462	29th Aug. 1867	Charles Slagg.
Improvements in drill sowing-machines, in horse rakes and in horse hoes.	2639	19th Sept. 1867	Joseph Henry Sams.
Means and apparatus or implements employed for distributing sewage over land.	2898	16th Oct. 1867	Baldwin Latham.
Machines for dibbling and dropping seed and corn.	3043	29th Oct. 1867	Graham William Betham Edwards.
SPINDLES; SPINDLES AND FLYERS.			
Spinning and twisting machinery - - - (*flyers.*) (*Communicated by George Chatterton.*)	199	25th Jan. 1867	George Haseltine.
Self-oiling spindles for spinning, doubling and winding frames. (*Communicated by Francis Rabbeth and John Edwin Atwood.*)	298	2nd Feb. 1867	John Garrett Tongue.
Certain improvements in machinery or apparatus for spinning and doubling cotton or other fibrous materials. (*spindles and flyers.*)	431	16th Feb. 1867	John Shaw.
Adjustable lock spindles - - - -	455	20th Feb. 1867	Michael Cavanagh.
Spinning machinery - - - (*forming flyers.*) (*Communicated by Constant Peugeot.*)	750	15th March 1867	William Edward Newton.
Spindles and flyers employed in machinery for preparing and spinning cotton, flax and other fibrous substances - - -	1030	6th April 1867	Frederick Alexander Fitton. Thomas Hall.
Apparatus for spinning and doubling fibrous materials.	1131	17th April 1867	Samuel Shore.
Machinery for preparing cotton and other fibrous substances - - - - -	1152	20th April 1867	James Galloway. Thomas Settle.
Certain improvements in lubricators to be used for the bottom ends of vertical spindles or shafts.	1224	27th April 1867	Joseph Wilson Lowther.
Certain improvements in the manufacture of tubular "flyers" employed in spinning and twisting fibrous materials.	1685	8th June 1867	Joshua Horton.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SPINDLES, &c.—*continued.*			
Self-lubricating bolsters for spinning machines - (*Communicated by Erastus Newton Steere.*)	2117	19th July 1867	George Tomlinson Bousfield.
Machinery for preparing cotton and other fibrous materials for spinning - - - -	2411	22nd Aug. 1867	Henry Higgins. Thomas Schofield Whitworth.
Improvements in machinery or apparatus for spinning, twisting and roving worsted or other fibrous substances, to facilitate the doffing.	2841	9th Oct. 1867	John Speight.
Processes of and apparatus for roving, spinning and twisting fibrous substances.	2932	18th Oct. 1867	Thomas Whitehead.
Spinning machinery - - - - (*Communicated by James Eaton.*)	2996	24th Oct. 1867	John Henry Johnson.
Flyers of spinning and twisting frames - -	3242	15th Nov. 1867	Robert Charles Addy.
Steps of spindles for spinning, roving, slubbing, doubling and twisting frames - - - -	3432	3rd Dec. 1867	James Collingham. Thomas Ellison Smith.
Improvements in elastic packings for the pistons of steam-engines and for other purposes, and in the machinery employed in the manufacture of such packings. (*revolving spindles.*)	3495	9th Dec. 1867	Edward Keirby.
Spinning and twisting frames known under the denomination of "cap frames" and "flyer frames" - - - - - -	3533	12th Dec. 1867	James Collingham. Thomas Ellison Smith.
An improved mode of reducing the friction of revolving and sliding surfaces. (*spindles.*)	3628	21st Dec. 1867	Edward Lord.
Machinery or apparatus for spinning cotton and other fibrous materials. (*forming tips of spindles.*) (*Communicated by James Eaton.*)	3719	31st Dec. 1867	John Henry Johnson.
SPINNING AND PREPARING FOR SPINNING.			
I.—Opening, Ginning, Breaking and Cleaning Fibrous Materials.			
Machinery for preparing cotton and other fibrous materials for spinning. (*opener.*)	62	9th Jan. 1867	John Muir Hetherington.
Machinery for ginning cotton - - - (*Communicated by Charles Wilson Boyd.*)	153	21st Jan. 1867	William M^{c}Andrew.
Treating and preparing silk - - - (*see* "DYEING.") (*Communicated by Adolphe Philippe and Gustave Fortier.*)	264	31st Jan. 1867	Clinton Edgcumbe Brooman.
Treating vegetable substances chiefly applicable to the manufacture of paper pulp and fibres. (*for spinning.*) (*Communicated by Benjamin Chew Tilghman.*)	385	11th Feb. 1867	William Edward Newton.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SPINNING, &c.—*continued.*			
Machinery for scutching flax or other fibrous materials, and also for opening and straightening fibrous materials (which have been previously made up into yarns and threads), in order to prepare the same for spinning and other purposes.	450	19th Feb. 1867	Edward Brasier.
An improved flax stripping or peeling machine - (*Communicated by Pareydt de Bergues.*)	596	4th March 1867	William Edward Gedge.
Disaggregation of china grass, hemp, flax, jute, phormium tenax and other vegetable fibres, for the production of threads, fabrics, and pulp for paper. (*Communicated by François Mathurin Caillard.*)	799	19th March 1867	William Clark.
Improvements in means or apparatus employed for treating flax, hemp, jute, china grass or other similar fibrous materials.	801	20th March 1867	Robert Hanham Collyer.
Machinery for seeding, breaking, drying, washing, bleaching, softening, combing, brushing and hackling flax, hemp, jute, china grass, New Zealand flax, Esparto and other fibres, for spinning and paper stuff.	841	22nd March 1867	John Spencer.
Method and means to be employed in cleansing wool previous to combing or carding the same. (*Communicated by André Jules Grand Ry and Corneil Joseph Petit.*)	872	26th March 1867	Arthur Charles Henderson.
Certain improvements in machinery or apparatus to be employed in the preparation of cotton, wool and other similar fibrous materials.	907	28th March 1867	William Crighton.
Preparation of fibre from rags or other semi-waste substances wholly or partly of wool or animal fibre, for the manufacture of yarns.	934	29th March 1867	William Wood.
Treatment of flax, hemp, jute, china grass and other fibrous materials.	948	30th March 1867	Robert Hanham Collyer.
Machinery or apparatus for teazing and opening textile or fibrous materials - - -	1019	5th April 1867	William Tatham. William Tweedale Heap.
Improvements in treating and softening jute, hemp, flax and other fibrous substances, and in the machinery or apparatus connected therewith.	1034	6th April 1867	William Parell Butchart.
Machinery for picking and ginning cotton - (*Communicated by Enoch Osgood.*)	1068	10th April 1867	Alfred Vincent Newton.
Machinery for preparing and spinning cotton and other fibrous materials - - -	1079	11th April 1867	James Higgins. Thomas Schofield Whitworth.
Improvements in machines for winding yarn or thread on to bobbins, spools or similar surfaces, parts of which improvements are applicable to self-acting mules and like machines for spinning, doubling or twisting fibrous materials.	1128	16th April 1867	William Weild.
A new or improved process of destroying vegetable matters in wools, noils, woollen waste and rags. (*Communicated by Constant Schaller.*)	1198	25th April 1867	Clinton Edgcumbe Brooman.
Improvements in the treatment of fibrous materials and in apparatus to be used in such treatment. (*for spinning.*)	1207	26th April 1867	John Watson Burton.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SPINNING, &c.—*continued.*			
Improved machinery for burring wool, ginning cotton or other analogous purposes. (*Communicated by Robert J. Clay, James T. Husted, Ebenezer Gilbert Burling and Cornelius Corson.*)	1215	26th April 1867	William Edward Newton.
Machinery for breaking or cutting flax, hemp, jute and other fibrous materials - -	1507	21st May 1867	William Nichols. James Burnley. Thomas Wilson. George Jackson.
Machinery for heckling or cleaning flax, hemp and other fibrous material, and for preparing the same for spinning.	1719	11th June 1867	William Rowan.
Apparatus by which the oscillations of the comb in the carding-engine, the knife in the cotton gin, and the saw in the reaping-machine or reciprocating saw, may be readily multiplied -	1809	21st June 1867	William Robertson. Charles James Waddell.
Cotton gins - - - - - (*Communicated by Charles Spofford and Charles Henry Hersey.*)	1864	26th June 1867	William Robert Lake.
Batching or treating jute - - -	1901	29th June 1867	Alexander Morrison Fell.
Machinery or apparatus for opening and cleaning cotton or other fibrous materials.	1923	2nd July 1867	John Greenhalgh.
Machinery for ginning cotton - - - (*Communicated by Charles Wilson Boyd.*)	2087	16th July 1867	William McAndrew.
Mode of treating flax, hemp and other fibrous plants for the purposes of spinning.	2104	18th July 1867	Nicholas John Oliver Stubber.
Machinery and apparatus for cleaning and preparing fibrous substances, and for opening twisted yarns and woven fabrics.	2219	1st Aug. 1867	Francis Alton Calvert.
Brakes for cotton lappers or scutchers - - (*Communicated by Richard Kitson.*)	2242	2nd Aug. 1867	John Garrett Tongue.
Machinery for preparing cotton and other fibrous materials for spinning - - - -	2411	22nd Aug. 1867	Henry Higgins. Thomas Schofield Whitworth.
Improvements in the treatment of jute and in oils or preparations for softening the fibres thereof.	2664	21st Sept. 1867	James Baird.
Machinery for preparing and spinning cotton or other fibrous substances.	2947	19th Oct. 1867	Ellis Butterworth.
Improvements in cleaning cotton and cotton seeds, and in the machinery or apparatus employed therein. (*Communicated by Felix Figon.*)	3048	29th Oct. 1867	John Henry Johnson.
Cleansing wool and other animal fibres - -	3249	16th Nov. 1867	Read Holliday.
Machinery for opening and cleaning cotton and other fibrous substances.	3263	18th Nov. 1867	Edward Lord.
Improvements in the extraction of ammonia from fermented and other liquids, and in the regeneration of the agents used in such extraction. (*from waste waters of wool washing.*) (*Communicated by Armand Coste and Louis Taupin De Rosnay.*)	3566	14th Dec. 1867	Alexander Melville Clark.
Machinery for softening jute, hemp and similar fibrous materials - - - -	3643	23rd Dec. 1867	William Walton Urquhart. Joseph Lindsay.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SPINNING, &c.—*continued.*			
II.—Carding, Combing and Heckling Fibrous Materials; Making Cards.			
Machinery for preparing cotton and other fibrous materials for spinning. (*carding-engines.*)	62	9th Jan. 1867	John Muir Hetherington.
Certain improvements in apparatus for grinding "cards" to be employed in preparing cotton and other fibrous materials.	173	23rd Jan. 1867	Joseph Standring Dronsfield.
Machinery or apparatus for preparing and combing wool, silk, cotton, flax, china grass or other fibrous substances - - - - -	293	2nd Feb. 1867	John Smith. George Wilson.
Carding-engines - - - - - (*Communicated by Seldon L. Crockett and Benjamin T. Mills.*)	390	12th Feb. 1867	John Billington Booth.
Improved machinery for feeding carding-machines	428	15th Feb. 1867	James Ferrabee.
Machinery for preparing cotton, wool and other fibrous materials for spinning.	529	26th Feb. 1867	John Tatham.
Certain improvements in carding-engines to be employed for carding cotton and other fibrous materials - - - - -	542	27th Feb. 1867	Thomas Bispham Kay. Francis Hamilton.
Preparing wool and other fibrous materials to be spun.	555	28th Feb. 1867	Samuel Shore.
Machinery for combing cotton, wool and other fibrous materials.	834	22nd March 1867	George Little.
Machinery for seeding, breaking, drying, washing, bleaching, softening, combing, brushing and hackling flax, hemp, jute, China grass, New Zealand flax, Esparto and other fibres, for spinning and paper stuff.	841	22nd March 1867	John Spencer.
Machinery for preparing and spinning cotton and other fibrous materials - - -	1079	11th April 1867	James Higgins. Thomas Schofield Whitworth.
Machinery for combing wool and other fibres -	1383	8th May 1867	George Edmond Donisthorpe.
An improved machine for flattening hackle pins or comb teeth employed in machines for combing wool or other fibrous substances.	1435	15th May 1867	Charles Perry.
Machinery for carding wool and other fibrous materials. (*Communicated by Celestin Martin.*)	1576	28th May 1867	Henri Adrien Bonneville.
Machinery for heckling or cleaning flax, hemp and other fibrous material, and for preparing the same for spinning.	1719	11th June 1867	William Rowan.
Certain improvements in apparatus to be employed in the preparation of cotton and other fibrous materials. (*carding-engines.*)	1734	13th June 1867	Robert Hyde Barton.
Machinery for oiling wool or fibre to prepare it for carding, combing or other treatment - -	1758	15th June 1867	Louis John Crossley. Joseph Sunderland.
Apparatus by which the oscillations of the comb in the carding-engine, the knife in the cotton gin, and the saw in the reaping-machine or reciprocating saw, may be readily multiplied - -	1809	21st June 1867	William Robertson. Charles James Waddell.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SPINNING, &c.—*continued.*			
"Screw-gill boxes" for preparing wool and other fibrous substances.	1877	27th June 1867	William Hodgson.
Machinery for manufacturing cards for combing or carding fibrous materials. (*Communicated by Augustus Bisco Prouty.*)	2013	9th July 1867	William Robert Lake.
Machinery for preparing and spinning or doubling cotton and other fibrous materials - -	2076	15th July 1867	John Muir Hetherington. Robert Walker Pitfield.
Carding-engines - - - - -	2112	18th July 1867	Ralph Thomas Bradbury. Thomas Bottomley.
Certain improvements in carding-engines -	2209	31st July 1867	Benjamin Dobson. William Slater.
Certain improvements in carding-engines -	2405	22nd Aug. 1867	Robert King. John Lowden. William Gartside.
Machinery for preparing cotton and other fibrous materials for spinning - - -	2411	22nd Aug. 1867	Henry Higgins. Thomas Schofield Whitworth.
Machinery for combing or dressing silk, flax, china grass, cotton or other fibrous substances.	2533	7th Sept. 1867	John Smith.
Carding-engines - - - - -	2642	20th Sept. 1867	Joseph John Harrison. Edward Harrison.
Means of and apparatus for lubricating certain parts of doffing knife apparatus.	3448	4th Dec. 1867	Joseph Newton.
Improved machinery for preparing fibrous substances for spinning.	3489	7th Dec. 1867	William Clissold.
Improvements in the treatment of fibrous materials and in apparatus used therein. (*oiling before carding.*)	3510	10th Dec. 1867	John Watson Burton.
Machinery known as the condenser carder -	3598	18th Dec. 1867	William Preston. Charles Walker.
Machinery for carding and spinning wool and other fibrous materials. (*Communicated by Célestin Martin.*)	3621	20th Dec. 1867	Henri Adrien Bonneville.
Machinery for preparing, spinning and doubling cotton and other fibrous materials - -	3679	27th Dec. 1867	Henry Higgins. Thomas Schofield Whitworth.
Certain improvements in carding-engines to be employed in the process of manufacturing felt carpeting - - - - -	3722	31st Dec. 1867	William Mitchell. Thomas Mitchell.
III.—Roving, Slubbing, Spinning, Twisting, Doubling and Throwing Fibrous Materials.			
Improvements in the manufacture of fibrous yarns or threads and in apparatus for the same -	1	1st Jan. 1867	William Wood. James William Wood.
Improvements in or applicable to mules and like machines for roving, slubbing, spinning, twisting and doubling cotton, wool and other fibrous materials - - - -	37	5th Jan. 1867	Charles Preston. George Dania. William Houghton. Reuben Bottomley.
Improved apparatus for regulating, controlling and for varying the speed of shafts and machinery. (*roving frames.*)	51	8th Jan. 1867	Robert Robinson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SPINNING, &c.—*continued.*			
Machinery for preparing cotton and other fibrous materials for spinning. (*roving and slubbing frames.*)	62	9th Jan. 1867	John Muir Hetherington.
Spinning and twisting machinery - - (*Communicated by George Chatterton.*)	199	25th Jan. 1867	George Haseltine.
Improved arrangements of drawing rollers used in machinery for preparing and spinning fibrous materials.	216	26th Jan. 1867	Jacob Taylor.
Machinery for roving and spinning wool and other fibrous materials. (*Communicated by Edwin Allen and Henry Tatem Potter.*)	219	26th Jan. 1867	George Haseltine.
Certain improvements in machinery or apparatus employed in doubling cotton and other fibrous materials.	234	29th Jan. 1867	Thomas Williams.
An improved species of yarn manufactured from fibrous materials, and apparatus for its manufacture - - - - -	262	31st Jan. 1867	Gustavus Adolphus John Schott. John Siegmund Rosenthal.
Certain improvements in machinery or apparatus for doubling and twisting cotton and other fibrous materials.	283	1st Feb. 1867	Henry Ermen.
Self-oiling spindles for spinning, doubling and winding frames. (*Communicated by Francis Rabbeth and John Edwin Atwood.*)	298	2nd Feb. 1867	John Garrett Tongue.
An improvement in spinning frames - -	320	5th Feb. 1867	Thomas Craven.
Bobbins for spinning machinery - - - (*Communicated by the Metallic Bobbin Company, Incorporated.*)	336	6th Feb. 1867	William Edward Newton.
Twisting or doubling frames for yarns - -	366	8th Feb. 1867	Thomas Gill.
Machinery for cutting and polishing metals - (*grooves of scrolls.*)	410	14th Feb. 1867	John Thompson.
Machinery for drawing fibrous substances in drawing and spinning frames.	426	15th Feb. 1867	John Combe.
Certain improvements in machinery or apparatus for spinning and doubling cotton or other fibrous materials.	431	16th Feb. 1867	John Shaw.
Machinery for the manufacture of speckled or spotted threads. (*see* "WINDING.") (*Communicated by Veran Sabran and Gaston Jesse.*)	489	22nd Feb. 1867	Clinton Edgcumbe Brooman.
Manufacture of steel caps for spinning and other purposes - - - - -	500	23rd Feb. 1867	William Deakin. John Bagnall Johnson.
Machinery for preparing cotton, wool and other fibrous materials for spinning.	529	26th Feb. 1867	John Tatham.
Machinery for twisting and doubling fibres and threads.	541	27th Feb. 1867	William Dyson.
Cops or bobbins and parts connected therewith, used in preparing and spinning fibrous substances - - - - -	589	2nd March 1867	Alfred Illingworth. Henry Illingworth.
Certain improvements in apparatus for spinning and twisting cotton and other fibrous materials	627	6th March 1867	Henry Barton. Edward Whalley.
Manufacture of metallic rollers used in preparing or treating cotton and other fibrous substances.	666	8th March 1867	Joshua Horton the younger.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SPINNING, &c.—*continued.*			
Machinery or apparatus for spinning and doubling silk, cotton, wool or other fibrous materials -	693	11th March 1867	William Dempsey.
Preparing flax, hemp, china grass, formium tenax, jute and other vegetable fibrous substances for spinning.	711	12th March 1867	William Trimble.
An improved combination of apparatus for winding and twisting certain species of yarns.	712	12th March 1867	William Hall.
Spinning machinery - - - - - (*Communicated by Constant Peugeot.*)	750	15th March 1867	William Edward Newton.
Improvements in the manufacture of textile fabrics and in the means or apparatus employed therein. (*gumming and twisting the yarn.*)	815	21st March 1867	James Booth.
Machinery for spinning flax, tow, hemp and other fibres.	837	22nd March 1867	John Lawson.
Printing yarns - - - - - - (*whilst being spun.*)	850	23rd March 1867	William James Hanson.
Means or apparatus for spinning and twisting fibrous substances.	852	23rd March 1867	William Busfield.
"Banding" for driving the spindles of machines used for spinning, doubling and twisting cotton, wool, flax, silk and other fibrous materials. (*see* "STRAPS.")	877	26th March 1867	Thomas Unsworth.
Machinery or apparatus for doubling or twisting yarns - - - - - -	910	28th March 1867	Frederick Nelson Taylor. Joah Lodge.
Improvements in apparatus for effecting the drawing, spinning, twisting and laying of hemp, flax, tow, worsted, wool, silk, cotton, china grass or other fibrous material, for the manufacture of yarn, thread, twine, cord or rope, which improvements are also applicable to the manufacture of cord or rope from iron or other metal wire.	938	29th March 1867	William Bywater.
Machinery or apparatus to be employed in doubling or twisting cotton, wool or other fibrous substances.	946	30th March 1867	Samuel Montague Grover.
Machinery or apparatus for spinning wool or other fibrous substances.	1009	4th April 1867	Joseph Ladley.
Spindles and flyers employed in machinery for preparing and spinning cotton, flax and other fibrous substances - - - - -	1030	6th April 1867	Frederick Alexander Fitton. Thomas Hall.
Certain improvements in apparatus for covering woollen or fibrous yarns with an outer thread or yarn.	1047	8th April 1867	George Frederick James.
Winding up thread and other filaceous fabrics - (*copping.*)	1060	9th April 1867	Augustin Morel.
Machinery for preparing and spinning cotton and other fibrous materials - - - -	1079	11th April 1867	James Higgins. Thomas Schofield Whitworth.
Apparatus for spinning and doubling fibrous materials.	1131	17th April 1867	Samuel Shore.
Machinery for winding yarns, and also for printing the same simultaneously with the process of winding, at option - - - - -	1135	17th April 1867	Joseph Wilcock Dalby. George Odam Chapman.
Machinery for preparing cotton and other fibrous substances - - - - - -	1152	20th April 1867	James Galloway. Thomas Settle.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SPINNING, &c.—*continued.*			
Manufacture of a certain description of woven fabric.	1189	24th April 1867	John David Brickles.
Coverings for rollers of machines which are required to be smooth and elastic (*for spinning.*)	1219	27th April 1867	Joseph Moseley. Charles Moseley.
Machinery or apparatus for spinning worsted or other fibrous substances.	1223	27th April 1867	John Speight.
Certain improvements in the method of producing a variation of color during manufacture, upon woollen, cotton or other fibrous yarns or threads.	1233	29th April 1867	Joseph Fearns Lawton.
An improved species of yarn	1283	2nd May 1867	Gustavus Adolphus John Schott. John Siegmund Rosenthall.
Certain new and useful improvements in machinery for making roving and for spinning such into yarn.	1340	7th May 1867	Albert Huston Gilman.
Machinery or apparatus for building cops in winding machines.	1357	8th May 1867	James Gaskell.
An improved species of yarns, and apparatus to be applied in the production thereof	1405	11th May 1867	Joseph Wilcock Dalby. Pickles Constantine.
Improvements in or applicable to throstle and doubling frames and machines of like character for spinning, twisting and doubling fibrous materials.	1466	17th May 1867	George Bernhardt.
Machinery for weaving wool and other fibrous materials. (*Communicated by Célestin Martin.*)	1577	28th May 1867	Henri Adrien Bonneville.
Improvements in the manufacture of yarns used for weaving textile fabrics, and in the machinery or apparatus employed therefor.	1645	4th June 1867	Thomas Laidlaw.
Manufacture of certain descriptions of woollen cloths (*formation of yarn.*)	1683	7th June 1867	Robert Scott the younger. Joseph Nixon. John Beaumont.
Certain improvements in the manufacture of tubular "flyers" employed in spinning and twisting fibrous materials.	1685	8th June 1867	Joshua Horton.
An improvement in rollers used in frames for drawing and spinning or preparing fibrous materials.	1726	12th June 1867	Frederick Dunch Frost.
Certain improvements in apparatus to be employed in the preparation of cotton and other fibrous materials. (*drawing-frames.*)	1734	13th June 1867	Robert Hyde Barton.
Improvements in or applicable to machines for sizing yarns or threads preparatory to weaving, and also to slubbing and roving frames and to other machines	1744	15th June 1867	James Fletcher. William Carr.
Spinning and twisting machines	1862	26th June 1867	William Benjamin Gray. Samuel Gibson Sinclair.
An improvement in twisting or doubling machinery for producing a certain species of yarn	1896	28th June 1867	James Holroyd. William Fieldhouse.
Machinery for spinning and doubling	1932	3rd July 1867	John Elce. Peter Williams.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SPINNING, &c.—*continued.*			
Manufacture of Turkey, Wilton, Brussels, tapestry and other terry and cut-pile carpets and rugs. (*and making a compound thread.*)	2014	9th July 1867	William Wood.
Machinery for preparing and spinning or doubling cotton and other fibrous materials - -	2076	15th July 1867	John Muir Hetherington. Robert Walker Pitfield.
Means of communicating motion to the spindles of spinning, roving, doubling, twisting, winding and other similar machines.	2096	17th July 1867	Auguste de Smet.
Self-lubricating bolsters for spinning machines - (*Communicated by Erastus Newton Steere.*)	2117	19th July 1867	George Tomlinson Bousfield.
An improvement in rollers used in machinery for doubling cotton and other fibrous material -	2202	30th July 1867	James Haworth. Edwin Hamer.
Machines for spinning and doubling - -	2208	31st July 1867	Benjamin Dobson. James Cocker.
Machinery for spinning and doubling - -	2244	3rd Aug. 1867	John Elce. Thomas Elce.
Doubling and winding machines - - - (*Communicated by John Dollfus-Mieg.*)	2299	10th Aug. 1867	Henry Bernoulli Barlow.
Machines for spinning and doubling cotton, wool and other fibrous substances - - -	2364	17th Aug. 1867	Asa Lees. William Henry Rhodes.
An improved method of twisting or doubling yarns in mule spinning machinery - - -	2366	17th Aug. 1867	James Holroyd. William Fieldhouse.
Machinery for preparing cotton and other fibrous materials for spinning - - - -	2411	22nd Aug. 1867	Henry Higgins. Thomas Schofield Whitworth.
Mules for spinning and doubling - - -	2747	30th Sept. 1867	Benjamin Dobson. Robert Halliwell.
Machinery for spinning wool and other fibrous materials. (*Communicated by Auguste Seguier.*)	2758	1st Oct. 1867	Henri Adrien Bonneville.
Construction and working of back rollers, carriers and carriages in drawing, roving and spinning machinery for wool, hair, silk, flax and other fibrous substances - - - -	2767	2nd Oct. 1867	William Smith. Samuel Smith.
Improvements in machinery or apparatus for spinning, twisting and roving worsted or other fibrous substances, to facilitate the doffing.	2841	9th Oct. 1867	John Speight.
Apparatus for spinning and twisting yarns -	2881	14th Oct. 1867	David Estler Blacke.
Rollers used in frames for drawing and spinning or preparing fibrous materials.	2901	16th Oct. 1867	Frederick Dunch Frost.
Processes of and apparatus for roving, spinning and twisting fibrous substances.	2932	18th Oct. 1867	Thomas Whitehead.
Machinery for preparing and spinning cotton or other fibrous substances.	2947	19th Oct. 1867	Ellis Butterworth.
Spinning machinery - - - - (*Communicated by James Eaton.*)	2996	24th Oct. 1867	John Henry Johnson.
Improvements in or applicable to "cap frames" employed in spinning worsted or other fibrous substances.	3053	30th Oct. 1867	James Feather.
Certain improvements in the method of casting, forming or producing toothed wheels or gearing to be employed in machinery for preparing, spinning and twisting cotton or other fibrous substances - - - - -	3063	31st Oct. 1867	William Hall. John Wren. James Brandwood.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SPINNING, &c.—*continued.*			
Certain improvements in mules for spinning, doubling or twining cotton or other fibrous substances.	3101	4th Nov. 1867	Herbert Hebden.
An improved arrangement of machinery for making cops.	3227	14th Nov. 1867	James Combe.
Flyers of spinning and twisting frames - -	3242	15th Nov. 1867	Robert Charles Addy.
Preparing slivers of wool for spinning and dyeing -	3266	18th Nov. 1867	William Busfield. John Busfield. Joseph Busfield.
Machinery for twisting yarns of two or more colours and kinds, commonly called "French twist" or "Knotted yarn" - - - - -	3268	18th Nov. 1867	John Varley Thornton. Charles Abercrombie.
Certain improvements in mechanism or apparatus (termed drawing frames) employed for preparing cotton or other fibrous substances.	3338	26th Nov. 1867	Henry Greenhalgh.
Machinery or apparatus employed in the preparation of wool or other fibrous substances, technically known as condensers - - - -	3371	28th Nov. 1867	Thomas Carter. Benjamin Carter. John Lisle.
Spinning machinery - - - - -	3408	30th Nov. 1867	Thomas Holmes. William Wainman Holmes. John Frederick Holmes. John Bentley Lancaster. David Lancaster.
Spinning machinery - - - -	3411	30th Nov. 1867	William Priestley. William Bower.
Steps of spindles for spinning, roving, slubbing, doubling and twisting frames - - - -	3432	3rd Dec. 1867	James Collingham. Thomas Ellison Smith.
Machinery for spinning and doubling fibrous materials - - - - - -	3455	4th Dec. 1867	Joseph Thomas Webster. William Oxley.
Spinning and twisting frames known under the denomination of "cap frames" and "flyer frames - - - - - -	3533	12th Dec. 1867	James Collingham. Thomas Ellison Smith.
Improvements in machinery for twisting or doubling wool, silk, cotton or other fibrous substances, part of which is also applicable to machinery for spinning such substances -	3582	17th Dec. 1867	Noble Haley. John Hodgson.
Machinery for carding and spinning wool and other fibrous materials. (*Communicated by Célestin Martin.*)	3621	20th Dec. 1867	Henri Adrien Bonneville.
An improved mode of reducing the friction of revolving and sliding surfaces.	3628	21st Dec. 1867	Edward Lord.
Improvements in or applicable to flyer, throstle and doubling frames and machines of like character - - - - - -	3634	21st Dec. 1867	William Hurst. Joshua Henry Wilson.
Machinery for preparing, spinning and doubling cotton and other fibrous materials - -	3679	27th Dec. 1867	Henry Higgins. Thomas Schofield Whitworth.
An improved apparatus for drawing and spinning hemp, flax and other fibrous materials for making ropes and cables.	3712	31st Dec. 1867	Jacques Novikow.
Machinery or apparatus for spinning cotton and other fibrous materials. (*Communicated by James Eaton.*)	3719	31st Dec. 1867	John Henry Johnson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SPONGE.			
An improved sponge for cleaning slates and similar articles.	2646	20th Sept. 1867	Charles M^{c}Dermott.
SPRINGS.			
An improvement in elliptic or other elastic springs -	70	11th Jan. 1867	Edwin Marcus Chaffee.
Fire-arms - - - - - - (*Communicated by Sylvester Hayward Roper.*)	182	24th Jan. 1867	John Henry Johnson.
Volute springs - - - - - (*Communicated by Charles Morrill.*)	217	26th Jan. 1867	George Haseltine.
An improved description of breech-loaded and needle-exploding fire-arms, and cartridge appropriate thereto. (*form of springs.*)	251	30th Jan. 1867	Peter Ellis.
Wheels for carriages and other vehicles - - (*Communicated by John Raddin.*)	470	21st Feb. 1867	George Haseltine.
Springs for crinolines for ladies' petticoats and other garments - - - (*Communicated by Victor Alfred Krafft.*)	545	27th Feb. 1867	Louis Henry Philbois. Augustin Marchal.
Improved apparatus to be used as spinal, abdominal and pelvic truss supports. (*Communicated by Edmund Prior Banning.*)	569	28th Feb. 1867	William Edward Newton.
Buffing springs and parts connected therewith -	704	12th March 1867	Henry Lee Corlett.
Spring centres for doors and other purposes -	1043	6th April 1867	James Barker.
An improved spring for doors and other purposes -	1062	9th April 1867	Francis Waller.
Springs for buffers and bearings and for other purposes.	1369	9th May 1867	Thomas Aldridge Weston.
Improvements in wheeled carriages and in the construction of wheels and springs for such carriages and other vehicles - - -	1441	15th May 1867	George Coles. James Archibald Jaques. John Americus Fanshawe.
Spring bed bottoms - - - -	2145	23rd July 1867	Sterling Bonsall.
An improved metallic spring mattress - -	2363	17th Aug. 1867	Louis Avoyne-Bainée. Marie Joseph Sibillat.
Railway carriages - - - - -	2381	19th Aug. 1867	Clemens Reifert.
Method of and materials for manufacturing ammunition boxes, pontoons, baggage and other waggons and carriages, and various equipments for military, naval and civil purposes. (*forming springs.*)	2630	19th Sept. 1867	Thomas Charles Clarkson.
Pneumatic springs specially applicable to railway rolling stock. (*Communicated by Joseph Dauley.*)	2810	5th Oct. 1867	John Piddington.
An improved mode of preparing iron for the manufacture of various articles where great strength and capability of resistance to tensile strain or torsion is required. (*for springs.*) (*Communicated by Michel Pawlowitch Lwoff.*)	2865	11th Oct. 1867	William Edward Newton.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SPRINGS—*continued.*			
Improvements in the construction of railways and railway carriages, and in the means for propelling the said carriages. (*springs.*) (*Communicated by Charles Thompson Harvey.*)	2896	15th Oct. 1867	William Robert Lake.
Improvements in locomotive engines, vehicles and appendages thereto, for better and safer working on railways, tramways and common roads.	2907	17th Oct. 1867	William Bridges Adams.
Buffers and draw springs for railway carriages -	2992	24th Oct. 1867	Joseph Mitchell.
An improved cap for upholstery or furniture springs. (*Communicated by Ambrose Tower.*)	3068	31st Oct. 1867	William Robert Lake.
An improved artificial compound chiefly designed for use as a substitute for india-rubber or caoutchouc. (*for car springs.*) (*Communicated by Austin Goodyear Day.*)	3108	4th Nov. 1867	William Robert Lake.
An improved method of conveying rotatory motion to axles. (*india-rubber spring.*)	3271	18th Nov. 1867	Kenelm John Winslow.
An improved spring hinge - - - - (*Communicated by Jehiel Keeler Hoyt.*)	3364	27th Nov. 1867	William Robert Lake.
An improved elastic material to be used as springs in boots and shoes, and in various other ways to which the same may be applicable.	3445	4th Dec. 1867	Christopher Paley.
Certain improvements in springs to be applied to doors and for similar purposes.	3496	9th Dec. 1867	William Henry Cooke.
Certain improvements in the manufacture and construction of carriages, landaus and other similar vehicles.	3600	18th Dec. 1867	Joseph Cockshoot, junior.
Improvements applicable to the rigging, chains, windlasses, anchors and other parts of ships or vessels, or to collieries, railways, rolling stock or other purposes, to prevent sudden blows, jerks or strains. (*springs.*)	3637	21st Dec. 1867	James Davison.
Butt hinges - - - - - (*Communicated by Benjamin Franklin Barker.*)	3689	28th Dec. 1867	William Edward Newton.
STABLES, CATTLE STALLS, FEEDING TROUGHS AND RACKS, NOSE BAGS.			
Fittings for stables, harness rooms and cow houses	993	3rd April 1867	James Musgrave.
A new and improved kind of soap - - - (*for cleansing stables.*) (*Communicated by Emeric de Werchin.*)	1046	8th April 1867	Henri Adrien Bonneville.
Construction of movable palisades for parks, gardens and enclosures, the said invention being also applicable to training espaliers, vines and shrubs. (*pens for cattle.*)	1257	1st May 1867	Antoine Louet.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
STABLES, &c.—*continued.*			
An improved self-acting and ventilating nose or feed bag for horses - - - - (*Partly communicated by Nathaniel Knight.*)	1395	11th May 1867	John Adams Knight. Charles Bastand.
Manufacture of artificial granite and other artificial bricks and blocks suitable for buildings, engineering structures, pavements and other similar purposes. (*for stables.*) (*Communicated by Pierre Rodolphé Pozzi.*)	1458	17th May 1867	Perceval Moses Parsons.
Improvements in stable, cowhouse and harness room fittings, parts of which are also applicable for other purposes.	2698	25th Sept. 1867	James Musgrave.
Improved apparatus for regulating the supply of food to cattle, sheep and other animals.	3010	25th Oct. 1867	Peter Love.
Mats and matting - - - - - (*and nose bags.*)	3092	2nd Nov. 1867	William Cooke. Walter Francis.
STAMPS AND STAMPING; SEALS, MONOGRAMS, LABELS AND TICKETS; DAMPING, CANCELLING AND PROTECTING STAMPS AND LABELS.			
Cases or receptacles for needles, pins, cards, stamps, photographs, cigars and other similar articles.	122	17th Jan. 1867	Richard Newhall.
Ornamenting, printing, cutting, creasing, bending, embossing and manufacturing articles from wood and other materials. (*tablets, railway tickets, &c.*)	155	22nd Jan. 1867	Edward Tomlinson.
Manufacture of envelope cases, blotting books and other articles, commonly called "writing" or "library sets," and other similar articles. (*stamp boxes.*)	305	4th Feb. 1867	George William Betjemann.
An improved holder for railway and other tickets, part of which improved holder is applicable to other purposes. (*Communicated by Monsieur Charles Cotte.*)	412	14th Feb. 1867	Hector Auguste Dufrené.
An improvement in railway and other tickets - (*Communicated by Monsieur Charles Cotte.*)	413	14th Feb. 1867	Hector Auguste Dufrené.
Improvements in the manufacture of boot and shoe toe-pieces, and in the machinery or apparatus to be employed therein. (*stamping.*)	416	14th Feb. 1867	David Tenniswood.
An improved lubricator or tallow cup - - (*for steam stamps.*)	507	23rd Feb. 1867	John Bates.
Improvements in stamps or presses for marking the prices of goods, part of which invention is applicable to other stamps or presses.	681	11th March 1867	Adam Miliar.
Machines for printing and indenting portions of railway tickets and for other like purposes -	839	22nd March 1867	George Adams. William Thomas Whiteman.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
STAMPS, &c.—*continued.*			
Improved means of producing designs upon paper (*for trade marks.*)	947	30th March 1867	Walter Bentley Woodbury. Robert Howe Ashton.
Apparatus for expressing oils and fatty matters, and for forming and marking the cake produced in the manufacture.	967	1st April 1867	John Harker.
Improvements in the manufacture of spoons, forks and other similar articles, and in apparatus or machinery to be employed therein, parts of which said apparatus or machinery are applicable to other manufactures. (*stamping hollow forms.*)	1055	9th April 1867	Daniel Joseph Fleetwood.
Portable apparatus for issuing tickets, progressively numbered, to passengers in public conveyances and to visitors at public meetings.	1183	24th April 1867	John Haworth.
Cases and boxes for holding needles, pins and other articles. (*postage and receipt stamps.*)	1260	1st May 1867	Reuben Young.
Machines for dating or printing of railway and other tickets.	1659	6th June 1867	James Adams.
An improved stamping machine - - -	1692	8th June 1867	John Turner. Robert Buchanan Dunnett.
Apparatus for punching, cutting and embossing - (*labels and tickets.*)	1702	10th June 1867	Andrew Linmere Dowie. Robert M'Intyre.
Manufacture of dies for stamping - - -	1818	21st June 1867	William Price.
Presses for stamping or endorsing - - (*Communicated by Edouard Cornélis.*)	1890	28th June 1867	Alexander Melville Clark.
Machinery for printing consecutive numbers - (*tickets.*)	2084	16th July 1867	James Fraser.
Securing the more effectual obliteration of postage and other stamps.	2109	18th July 1867	William Warden.
An improved machine for stamping letters - (*Communicated by Johann Carl, Wilhelm Maas and Carl Fischer.*)	2288	8th Aug. 1867	Francis Wirth.
An improved appliance to be used for securing and holding railway tickets and labels -	2317	12th Aug. 1867	Walfrid Swenson. Johan Ernst Heilmann.
Metallic capsules for bottles and other like receptacles (*as labels.*)	2339	14th Aug. 1867	William Betts.
An improved apparatus for sealing letters, envelopes and other papers.	2372	17th Aug. 1867	Mayer Cahen.
An improved metallic seal for envelopes - - (*Communicated by Ralph Jennings.*)	2647	20th Sept. 1867	Charles M'Dermott.
Improvements in apparatus for the manufacture of postage stamps and other labels, and for reproducing designs on paper or fabrics, and in the preparation of engraved surfaces to be used therefor. (*and gumming.*) (*Communicated by Eugène Bordes, junior.*)	3009	25th Oct. 1867	Alexander Melville Clark.
An improved label band - - - - (*see* "FILES and CLIPS.")	3102	4th Nov. 1867	Arthur Armstrong Lock Harrison.
An improved machine for forming, printing and counting labels.	3147	7th Nov. 1867	Isaac Hewitt.
Improved combined machinery for printing - (*pass tickets.*)	3387	29th Nov. 1867	James Fraser. George Duncan.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
STAMPS, &c.—*continued.*			
Apparatus for dating railway and other tickets -	3465	5th Dec. 1867	James Adams.
Presses for stamping or endorsing - - (*Communicated by Edouard Cornélis.*)	3516	11th Dec. 1867	Alexander Melville Clark.
An improved process for the reduction of tin so as to render it applicable for coating metals and for other purposes. (*reproducing figures by stamping.*) (*Communicated by Jules Feuquiéres.*)	3517	11th Dec. 1867	Alexander Melville Clark.
STARCH, SIZE, GLUE, GUM.			
An improvement in packing and preserving animal size.	607	5th March 1867	John Cowdery Martin.
Certain improvements in the method and apparatus for keeping warm glues, starches, gums and other liquids, which is also applicable for keeping other articles warm.	1208	26th April 1867	Tempest Booth.
Machinery or apparatus for separating liquids or moisture from substances, and also for revivifying and cooling animal charcoal and other substances, and for treating sugar. (*desiccating starch.*)	1605	30th May 1867	William Orr.
An apparatus for heating, boiling, agitating and raising size and other liquids.	2500	4th Sept. 1867	Hugh Gardiner Graham.
Improved modes of and means for curing, drying, preserving and packing meat, fruit, vegetables and other perishable substances. (*glue stock.*) (*Communicated by Daniel E. Somes.*)	3006	25th Oct. 1867	William Robert Lake.
Apparatus for boiling size - - -	3627	21st Dec. 1867	James Kenyon.
STEAM AND OTHER BOILERS; CLEANSING AND PREVENTING INCRUSTATION OF BOILERS; WATER-FEEDING APPARATUS FOR BOILERS.			
I.—Constructing Steam and other Boilers; Generating and Superheating Steam; Preventing Boiler Explosions.			
Tubular steam-boilers - - - -	76	11th Jan. 1867	James Howard. Edward Tenney Bousfield.
An improved construction of steam generator - (*Communicated by George Gould.*)	138	19th Jan. 1867	Alfred Vincent Newton.
Boiler apparatus of portable steam-engines -	162	22nd Jan. 1867	William Exall.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
STEAM-BOILERS, &c.—*continued.*			
Safety valves	192	25th Jan. 1867	John Wolstenholme. Edward Holt.
Improvements in steam-boilers and in boilers used for heating and warming purposes	276	1st Feb. 1867	William Fisken. David Fisken.
An improved construction of steam generator (*Communicated by Eli Thayer, Sabin Peters Pond and Daniel Bullard Pond.*)	292	2nd Feb. 1867	Alfred Vincent Newton.
Improved apparatus or mechanism for supplying steam-boilers with water, and for preventing their explosion.	295	2nd Feb. 1867	Henry Banks Wright.
Boilers or apparatus applicable to the generation of steam and to other purposes.	303	2nd Feb. 1867	Benjamin Harlow.
Improvements in generating steam and in apparatus employed therein.	375	9th Feb. 1867	Jacob Buhrer.
Steam-boilers	376	9th Feb. 1867	Robert James.
Utilizing of mineral and other oils for the production of heat and for illuminating purposes. (*heat for generating steam.*)	391	12th Feb. 1867	Sir James Young Simpson, Baronet.
Certain improvements in steam-boilers or generators. (*Communicated by John Lochhead and Charles Arthur Mathieu.*)	402	13th Feb. 1867	William Edward Gedge.
Improvements in gas cooking apparatus, and in steaming, baking, boiling and roasting apparatus	439	18th Feb. 1867	William Hill. Henry Charles Wilberforce.
Improvements in generating steam and vaporizing liquids, and in apparatus employed therein	514	25th Feb. 1867	John Christopher Rees Weguelin. Benjamin Hirst.
Apparatus for boiling fats, oils and bones, whereby to neutralize and avoid the escape of noxious gases.	515	25th Feb. 1867	William Barratt.
Steam-boilers	516	25th Feb. 1867	John Alison.
Generating heat by the admixture and combustion of a hydrocarbon vapor, air and the gaseous components of steam (*heating steam generators.*) (*Communicated by Henry Rutger Foote.*)	560	28th Feb. 1867	Stillman Boyd Allen. Jairus Handy Winsor.
Improvements in self-acting steam and fluid safety gauges, the said improvements being applicable to cocks or taps and valves.	591	2nd March 1867	John Ambrose Coffey.
Improvements in means or apparatus for generating, superheating and condensing steam, and heating or boiling water or other liquids, parts of which are applicable to other purposes	601	4th March 1867	James Marchent. John Parker.
Certain improvements in boilers or steam generators.	609	5th March 1867	Thomas Beeley.
Improvements in the utilization of mineral and other oils for the production of heat, and in the apparatus employed therefor. (*for generating steam.*)	616	5th March 1867	James Edward Duyck.
Improvements in or applicable to certain marine and stationary land boilers for generating steam.	626	6th March 1867	Edward Storey.
Safety valves for steam-boilers or generators (*Communicated by George William Richardson.*)	643	7th March 1867	Alfred Vincent Newton.
An improved mode of generating steam	645	7th March 1867	John Garrison Woodward.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
STEAM-BOILERS, &c.—*continued.*			
Steam-boilers - - - - -	661	8th March 1867	Charles Mace.
Steam-boilers - - - - -	662	8th March 1867	Joseph Whitaker.
Apparatus connected with steam-boilers - -	679	9th March 1867	Robert David Napier.
Steam cooking and baking apparatus - -	746	15th March 1867	William Henry Graveley. James Ewing.
Improvements in boilers or steam generators and in valves or plugs connected therewith.	756	16th March 1867	Thomas Cowburn.
Boilers and apparatus for generating steam and evaporating fluids.	757	16th March 1867	Thomas Dunn.
Steam-engines and boilers - - -	771	16th March 1867	Edward Ellis Allen.
Improvements in steam fire-engines and boilers, such improvements being applicable to other purposes.	772	16th March 1867	James Shand.
Improvements in setting boilers and in safety valves for the same.	779	18th March 1867	William Henry Parsons.
Improvements applicable to steam-boilers and engines, for economizing fuel in the generation of steam, and in the apparatus connected therewith.	783	19th March 1867	John Robinson.
Certain improvements in safety valves for steam-boilers.	785	19th March 1867	Charles Frederick Cooke.
Construction and arrangement of the connections and casings of lock-up or protected safety valves for steam generating apparatus.	794	19th March 1867	Adam Scott Cameron.
Improvements in steam-boilers and in apparatus for heating the same, and also for obtaining heat for other purposes.	809	20th March 1867	John Russell Swann.
Improvements in utilizing the heating properties of petroleum and other liquid hydrocarbons and oils, and in apparatus employed therefor - (*generating steam.*)	930	29th March 1867	Arthur Barff. Joshua Kidd.
An improved system of tank locomotive engine -	977	2nd April 1867	Jean Jacques Meyer. Adolphe Meyer, jun^{r}.
Improvements in applying and fitting the tubes of multitubular boilers, condensers and other like capacities, and in apparatus for the same. (*Communicated by Victor Langlois.*)	988	2nd April 1867	William Clark.
Construction of steam-boilers - - -	1005	3rd April 1867	John Ogden. John Stephenson.
Obtaining motive-power and utilizing the products of combustion of liquid and other fuels.	1008	4th April 1867	Henry Davey.
Steam generators - - - - - (*Communicated by the Mitchell Safety Steam Generator Company [Incorporated].*)	1028	5th April 1867	William Edward Newton.
Furnaces of steam and other boilers - -	1076	11th April 1867	Samuel Barlow. Thomas Edmeston.
Improved apparatus for generating and distributing vapour.	1188	24th April 1867	Charles Frederick Whateley.
Apparatus for reducing and regulating the quantity and pressure of steam, fluids and gases.	1217	26th April 1867	George Pollard.
Improvements in the manufacture of gas and in the apparatus for holding the same. (*for raising steam.*)	1272	2nd May 1867	Peter Salmon.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
STEAM-BOILERS, &c.—*continued.*			
Safety valves and arrangements for preventing damage to or the explosion of steam-boilers. (*Communicated by Murdoch Macpherson.*)	1284	2nd May 1867	Thomas Wood.
A self-acting damper in connection with steam-boilers - - - - - - (*check against explosions.*)	1325	6th May 1867	William Schofield. Edmund Smith.
An improved system of tenders for locomotives -	1347	7th May 1867	George Krauss.
An improved method of preventing the explosion of steam-boilers and of promoting the generation of dry steam.	1368	9th May 1867	George Henry Cail.
An improved mode of constructing metal cocks, faucets and other similar articles. (*for steam-boilers.*) (*Communicated by William Westlake.*)	1407	11th May 1867	William Robert Lake.
Apparatus for generating and condensing steam -	1419	13th May 1867	Edward Field.
Improvements in producing and increasing combustion in blast and other furnaces, also for generating steam and for other similar or analogous purposes.	1454	16th May 1867	John Martin Stanley.
Improvements in marine and land boilers and their furnaces, and also other furnaces used for the manufacture of iron and other purposes.	1467	17th May 1867	Simon Regan.
Boilers for boiling or steaming roots, and for heating water for other purposes - -	1497	20th May 1867	Valentine Barford. John Skerman.
Steam generators - - - - (*Communicated by Richard Joseph Nunn.*)	1547	24th May 1867	Alexander Melville Clark.
Steam-boilers and the method of construction of the same.	1584	29th May 1867	Richard Pollit.
Improvements in steam-boilers and in evaporating pans.	1629	1st June 1867	Frederick Burnett Houghton.
Improvements in the construction of steam-boilers and in apparatus connected therewith.	1637	3rd June 1867	Charles Louis Joseph Carville, senior.
Certain improvements in furnaces, and in apparatus to be employed in the construction of steam-boilers.	1650	5th June 1867	David Hanson.
Fitting the tubes in flues of Cornish and other steam-boilers - - - -	1678	7th June 1867	William Wilson Wood. John Wood.
Construction of steam-boilers - - -	1706	10th June 1867	Thomas Holt.
An improved mode of obtaining motive-power - (*generating steam.*)	1787	19th June 1867	Francis William Waide.
Improvements in the manufacture of welded tubes and in apparatus employed for that purpose, which latter are partly applicable to other purposes - - - - - (*using water reservoir as a steam-boiler.*)	1937	3rd July 1867	William Galloway. George Plant.
Improvements in engines worked by the combustion of inflammable aëriform fluids, and in apparatus for producing such fluids.	2000	8th July 1867	Matthew Piers Watt Boulton.
Arrangement of the flues of certain boilers for generating steam.	2009	9th July 1867	James Credland.
Steam-boilers and furnaces - - -	2049	12th July 1867	George Sinclair.
Safety or relief valves - - -	2053	12th July 1867	John Pasfield.
Steam generators and condensers - -	2097	17th July 1867	John Slater.
Consuming smoke, economising fuel and generating steam.	2099	17th July 1867	Samuel Cunliffe Lister.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
STEAM-BOILERS, &c.—*continued.*			
Boilers or apparatus applicable to the generation of steam and to other purposes.	2235	2nd Aug. 1867	Benjamin Harlow.
Improved apparatus for generating steam - -	2312	12th Aug. 1867	Johann Heinrich Evers.
Apparatus for evaporating or recovering lees - (*and raising steam.*)	2327	13th Aug. 1867	Alexander Swan.
Uniting and treating iron, steel and other metals in sheets, plates, rails, bars, rods, links, bands, hoops, tubes or other formes, applicable to navigable vessels, forts, guns, bridges, roofs, floors, boilers, heaters, tanks, chests or like structures.	2376	19th Aug. 1867	William Bridges Adams.
Construction of steam-boilers and apparatus connected therewith.	2389	21st Aug. 1867	Joshua Murgatroyd.
An apparatus for heating, boiling, agitating and raising size and other liquids.	2500	4th Sept. 1867	Hugh Gardiner Graham.
Construction and fitting up of safety valves for steam-boilers or generators. (*Communicated by George William Richardson.*)	2520	5th Sept. 1867	Alfred Vincent Newton.
Steam-boilers - - - - -	2557	10th Sept. 1867	Charles James Spencer. Frederick Ware.
Improvements in apparatus applicable to the conversion of cereal and vegetable substances into saccharine matter, in treating and purifying saccharine substances extracted from malt, fruits and vegetables, in treating fatty matters, and in the manufacture of chemical products - (*boiler or close vessel.*)	2760	1st Oct. 1867	George Allibon. Alexandre Manbré.
Manufacture of strip or sheet iron for certain purposes. (*for making boiler tubes.*)	2768	2nd Oct. 1867	Richard Hobbs Taunton.
Improvements in mechanism or arrangements applicable to steam-boilers and their furnaces, the said mechanism or arrangements being especially applicable to those boilers and their furnaces with which gas is the combustible used.	2772	2nd Oct. 1867	Charles Ritchie.
Marine steam-boilers - - - - -	2777	2nd Oct. 1867	Charles Mace.
Improvements in and applicable to ovens, boilers and other apparatus in which heat is employed. (*Communicated by Alfred Charles Joly de Marval.*)	2780	3rd Oct. 1867	William Spence.
Improved methods of constructing steam generators for engines, new furnaces connected therewith, and the mode of working them, with machinery in combination with the uses to which they are applicable.	2792	4th Oct. 1867	Henry Pinkus.
Steam-boilers - - - - -	2857	11th Oct. 1867	John Charles Wilson.
An improved mode of preparing iron for the manufacture of various articles where great strength and capability of resistance to tensile strain or torsion is required. (*for constructing steam-boilers.*) (*Communicated by Michel Pawlowitch Lwoff.*)	2865	11th Oct. 1867	William Edward Newton.
Apparatus for superheating steam and other vapours (*Communicated by Leffert Ryerson Cornell.*)	2890	15th Oct. 1867	Henri Adrien Bonneville.
Steam-boilers and furnaces - - -	2920	17th Oct. 1867	William Tredgold. James McNeil.
Improved means and apparatus for economizing fuel and consuming smoke in steam-boilers and furnaces - - - - -	2987	24th Oct. 1867	John Ellison. Joseph Stirk.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
STEAM-BOILERS, &c.—*continued.*			
Construction of steam and other boilers - -	3000	25th Oct. 1867	William Fisken. David Fisken.
Improvements in the mode of and apparatus for burning the gases arising from the distillation of liquid hydrocarbons, and also in economizing fuel by the said process - - - (*heating steam-boilers.*)	3014	26th Oct. 1867	George Dorsett. Edward Dorsett. John Bennington Blythe.
Steam generators - - - - (*Communicated by S. Lloyd Wiegand.*)	3025	26th Oct. 1867	Alexander Melville Clark.
Steam-boilers - - - - -	3070	31st Oct. 1867	Isaiah Kendrick.
Tubular boilers - - - - -	3094	4th Nov. 1867	Charles Riley.
Steam-boilers - - - - - (*Communicated by John Benjamin Root.*)	3122	5th Nov. 1867	William Edward Newton.
Apparatus for burning and distilling petroleum and other oils, to generate steam, and for other purposes. (*Communicated by Adam Robertson and Ananias Smith.*)	3183	11th Nov. 1867	Clinton Edgcumbe Brooman.
Tubular boilers - - - - - (*Communicated by Louis Barret.*)	3212	13th Nov. 1867	Alexander Melville Clark.
Construction of locomotive engines for mountain rail or tramways.	3221	14th Nov. 1867	Robert Francis Fairlie.
Improvements in evaporating apparatus and in utilizing the steam derivable from such apparatus.	3277	19th Nov. 1867	William Anderson.
Apparatus for boiling, washing or cleansing and dyeing clothes and fabrics, and for other like purposes. (*Communicated by James Brown.*)	3290	20th Nov. 1867	William Brewster.
Improvements in the manufacture of gas, and in the treatment and application of such and other gases for cooking, warming, lighting, generating of steam and other purposes, combined with their use as a motive-power previous to being burned or consumed, and improvements in the apparatus for these purposes.	3313	23rd Nov. 1867	Peter Salmon.
Steam generators - - - - - (*Communicated by Pierre Joseph Guyet.*)	3321	23rd Nov. 1867	Clinton Edgcumbe Brooman.
Merchants' ships and other vessels and appliances connected therewith. (*steam-boilers.*)	3331	25th Nov. 1867	George Bell Galloway.
Steam-boilers - - - -	3343	26th Nov. 1867	John Addy Hopkinson. Joseph Hopkinson, junr.
An improved apparatus for boiling and washing textile fabrics and fibres. (*Communicated by Daniel Bliss Dudley.*)	3385	29th Nov. 1867	William Robert Lake.
An improved method of and apparatus for washing or cleansing clothes. (*Communicated by Moses Wilmington Staples.*)	3395	29th Nov. 1867	Alfred Vincent Newton.
Boilers for heating water to supply pipes, tubes or other apparatus for warming buildings.	3413	2nd Dec. 1867	John Clowes Woolfield.
Improvements in utilizing mineral and other oils for generating steam, and in the means or apparatus for effecting the same.	3434	3rd Dec. 1867	John Graham Hope.
Portable and other steam-engines and boilers -	3439	3rd Dec. 1867	William Brown. Charles Neale May.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
STEAM-BOILERS, &c.—*continued.*			
An improved lighting, heating and cooking apparatus, part of which is applicable to other purposes. (*boiling water.*) (*Communicated by Zoeth Durfee.*)	3451	4th Dec. 1867	Edward Thomas Hughes.
Safety apparatus for steam-boilers or steam generators - - - - -	3472	6th Dec. 1867	John William Kenyon. Robert Arthur Armitstead.
Tubular steam-boilers - - - -	3514	11th Dec. 1867	William John Fraser.
Means of and apparatus for obtaining and applying hydrogen gas to the furnaces of steam-engines, boilers, and kilns for the manufacture of bricks and lime.	3580	16th Dec. 1867	James Standfield.
Apparatus for boiling size - - -	3627	21st Dec. 1867	James Kenyon.
Construction of steam-engines and boilers -	3709	31st Dec. 1867	Thomas Messenger.
See also "FURNACES." *See also* "GAUGES."			
II.—Cleansing and Preventing Incrustation of Boilers; Purifying the Water.			
Apparatus for removing the scum from the surface of the water in steam-boilers.	15	3rd Jan. 1867	John William Kenyon.
Tubular steam-boilers - - - - (*retarding incrustation.*)	76	11th Jan. 1867	James Howard. Edward Tenney Bousfield.
Process of and apparatus for cleaning waste and other substances, and preventing the adhesion of sediment in steam-boilers and pipes.	774	18th March 1867	John Smith.
Preventing incrustations in steam-boilers - (*Communicated by Monsieur Elie Ducros.*)	1237	29th April 1867	Philippe Jean Jacques Allibert.
Apparatus for generating and condensing steam - (*preventing deposits.*)	1419	13th May 1867	Edward Field.
Preventing the incrustation of steam-boilers -	1586	29th May 1867	Jean François Nicolas Biesman Simons.
Scrapers for cleaning boiler tubes - -	2086	16th July 1867	James Mannock.
An improved apparatus for cleaning boiler and other tubes. (*Communicated by Jean Baptiste Christoffel, Samuel Booth and Samuel Booth, junior.*)	2134	22nd July 1867	William Robert Lake.
The application of a certain vegetable powder for removing and preventing incrustations in boilers	2294	9th Aug. 1867	Henry Augustus Avery. Georges Penabert.
Marine steam-boilers - - - (*removing scale and deposit.*)	2777	2nd Oct. 1867	Charles Mace.
Steam-boilers - - - - -	2929	18th Oct. 1867	James Seward. Henry Smith.
Improved means of preventing incrustation in boilers and other vessels in which water is heated.	2997	24th Oct. 1867	Charles Weightman Harrison.
An improved mode of preventing incrustation in and removing it from steam-boilers. (*Communicated by Josiah Johnson Allen.*)	3051	30th Oct. 1867	George Davies.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
STEAM-BOILERS, &c.—*continued.*			
An improved mode of and apparatus for cleaning boiler tubes.	3059	30th Oct. 1867	The Right Honourable James Earl of Caithness.
Tubular boilers - - - - (*Communicated by Louis Barret.*)	3212	13th Nov. 1867	Alexander Melville Clark.
Improvements in evaporating apparatus and in utilizing the steam derivable from such apparatus. (*preventing incrustation in boilers.*)	3277	19th Nov. 1867	William Anderson.
Prevention of incrustation in steam-boilers -	3483	7th Dec. 1867	Richard Boulton Jones. William Powell.
Means for preventing and removing incrustation in steam-boilers - - - -	3586	17th Dec. 1867	William Ross. Alfred Long.
III.—Water-feeding Apparatus for Boilers; Heating Feed-water.			
Improvements in apparatus for heating water and delivering water to steam-boilers, which improvements are also applicable to other purposes.	27	4th Jan. 1867	Josiah Lane.
An improved construction of steam generator - (*regulating supply of water.*) (*Communicated by George Gould.*)	138	19th Jan. 1867	Alfred Vincent Newton.
Injectors for steam-boilers - - - (*Communicated by Alfred Lenz.*)	166	22nd Jan. 1867	William Edward Newton.
Improved apparatus for supplying steam-boilers with water and indicating the quantity supplied. (*Communicated by Adrien Houget, Emile Bede and Laurent Roufosse.*)	243	29th Jan. 1867	William Edward Newton.
Improved apparatus or mechanism for supplying steam-boilers with water, and for preventing their explosion.	295	2nd Feb. 1867	Henry Banks Wright.
Improvements in means or apparatus for generating, superheating and condensing steam, and heating or boiling water or other liquids, parts of which are applicable to other purposes - (*heating feed water.*)	601	4th March 1867	James Marchent. John Parker.
An improved feed-water regulator for steam-boilers (*Communicated by John Wesley Doughty and Benjamin Franklin Olmsted.*)	614	5th March 1867	George Haseltine.
Improvements in or applicable to certain marine and stationary land boilers for generating steam. (*heating feed water.*)	626	6th March 1867	Edward Storey.
Improvements in boilers or steam generators and in valves or plugs connected therewith.	756	16th March 1867	Thomas Cowburn.
Boilers and apparatus for generating steam and evaporating fluids. (*heating feed water.*)	757	16th March 1867	Thomas Dunn.
Improvements applicable to steam-boilers and engines, for economizing fuel in the generation of steam, and in the apparatus connected therewith. (*heating feed water.*)	783	19th March 1867	John Robinson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
STEAM-BOILERS, &c.—*continued.*			
Heating water for feeding the boilers of condensing steam-engines.	925	29th March 1867	Kenyon Barnes.
Apparatus employed for heating the feed water of steam-boilers - - - - -	1003	3rd April 1867	William Stafford. William Porter M^{c}Callum.
Steam generators - - - - - (*Communicated by the Mitchell Safety Steam Generator Comp^{y}. [Incorporated].*)	1028	5th April 1867	William Edward Newton.
An improved system of tenders for locomotives - (*injector.*)	1347	7th May 1867	George Krauss.
Apparatus for injecting and ejecting liquids and fluids.	1513	21st May 1867	Andrew Barclay.
An improved feed water arrangement for the tenders or water tanks of locomotive engines. (*Communicated by Charles Schau.*)	1539	23rd May 1867	Alfred Vincent Newton.
Improvements in the construction of steam-boilers and in apparatus connected therewith. (*supplying heated water.*)	1637	3rd June 1867	Charles Louis Joseph Carville, senior.
An improved combined feed-water regulator and water-gauge for steam-boilers. (*Communicated by Lewson E. Chase.*)	1824	22nd June 1867	Oliver Rice Chase.
Machinery or apparatus for raising and forcing water and other fluids - - - - (*feeding steam generators.*)	1828	22nd June 1867	Thomas Wilson. William Hall.
A continuous self-acting condenser, being an improved boiler feeding apparatus.	2077	15th July 1867	Julian Briere.
Improvements in the lateral action or induction of fluids, and in the apparatus or mechanism employed therefor.	2106	18th July 1867	Alexander Morton.
Improved means of heating the feed-water supplied to steam-boilers.	2107	18th July 1867	Thomas Dawson Walker.
Improvements in apparatus for raising, supplying and measuring water to steam-boilers, part of which invention is also applicable to measuring water for other purposes.	2422	23rd Aug. 1867	John Varley.
Apparatus for supplying or feeding water to steam-boilers and other vessels - - -	2430	24th Aug. 1867	Henry Davey. David Davy.
An improved fuel economizer - - - (*heating feed water.*)	2584	12th Sept. 1867	James Perrin.
Improvements in apparatus for regulating automatically the supply of gas, air and water, or any one or more of them, to steam-boilers heated by gas or otherwise, and for utilizing the heat of the gases produced or heated by combustion.	2674	23rd Sept. 1867	Charles Ritchie.
Apparatus for supplying steam-boilers with water - (*Communicated by Henry Demarest.*)	2722	26th Sept. 1867	John Henry Johnson.
Improvements in mechanism or arrangements applicable to steam-boilers and their furnaces, the said mechanism or arrangements being especially applicable to those boilers and their furnaces with which gas is the combustible used. (*regulating the supply of water.*)	2772	2nd Oct. 1867	Charles Ritchie.
Improved means of and apparatus for heating the water to be used in steam-boilers and in other vessels - - - - -	2773	2nd Oct. 1867	James Henry Nelson. Thomas Briggs.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
STEAM-BOILERS, &c.—*continued.*			
Improved methods of constructing steam generators for engines, new furnaces connected therewith, and the mode of working them, with machinery in combination with the uses to which they are applicable. (*water feed regulators.*)	2792	4th Oct. 1867	Henry Pinkus.
An improved feed-water apparatus for maintaining a proper water level in steam-boilers and other vessels.	2861	11th Oct. 1867	Arthur Helwig.
Apparatus for regulating the feed of steam-boilers -	2868	12th Oct. 1867	James Buckingham. John Sanders Blockey.
Steam-boilers and furnaces - - -	2920	17th Oct. 1867	William Tredgold. James McNeil.
Improvements in or applicable to that apparatus known as "Giffard's injector," and in the method of and machinery or tools for making the same.	3169	9th Nov. 1867	James Gresham.
Tubular boilers - - - - - (*Communicated by Louis Barret.*)	3212	13th Nov. 1867	Alexander Melville Clark.
Steam generators - - - - (*feed water heater.*) (*Communicated by Pierre Joseph Guyot.*)	3321	23rd Nov. 1867	Clinton Edgcumbe Brooman.
An improved steam injector for supplying water to steam-boilers or tanks. (*Communicated by Neil Currie, James Currie and William Owen.*)	3350	26th Nov. 1867	Alfred Vincent Newton.
Portable and other steam-engines and boilers - (*feed water heater.*)	3439	3rd Dec. 1867	William Brown. Charles Neale May.
Liquid meters or apparatus for measuring and registering the volume of water or other liquid flowing under pressure through pipes or ducts. (*gauging feed water.*)	3587	17th Dec. 1867	Ernest Marie Du Boys.
STEAM-ENGINES (*Stationary, Locomotive and Marine*).			
Improvements in planing machines, which improvements are also applicable to other machines and engines in which sliding surfaces are employed. (*slides of steam-engines.*)	2	1st Jan. 1867	William Muir.
Steam jackets for steam-engines - - -	35	5th Jan. 1867	Edward Alfred Cowper.
Improvements in engines for boring and working rock and other material, and in stands for such engines, the improvements in engines being partly applicable to other purposes.	43	7th Jan. 1867	Frederick Bernard Dœring.
Improved apparatus for regulating, controlling, and for varying the speed of shafts and machinery. (*engines for common roads.*)	51	8th Jan. 1867	Robert Robinson.
Steam-engines - - - - -	61	9th Jan. 1867	James Petrie.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
STEAM-ENGINES—*continued.*			
Rotary engines (*Communicated by Truman Merriam and James Cushing.*)	100	14th Jan. 1867	William Clark.
Certain novel and improved combinations and arrangements of differential wheel gearing, and its application to various purposes (*for traction engines.*)	125	18th Jan. 1867	Charles Frederick Cooke. John Standfield.
Locomotive engines	146	19th Jan. 1867	Edward Slaughter.
Common road traction engines (*Communicated by Albert Schmid.*)	267	31st Jan. 1867	John Henry Johnson.
Improvements in machine tools for manufacturing parts of locomotive engines, parts of which improvements are also applicable to other similar or analogous purposes.	334	6th Feb. 1867	Stephen Alley.
Slide valves	343	7th Feb. 1867	William George Beattie.
An improved steam roller, also applicable as a traction engine and portable engine.	347	7th Feb. 1867	William Thomas Carrington.
Machinery or apparatus for boring and planing metals. (*steam-engine cylinders.*)	361	8th Feb. 1867	Henry Allason Fletcher.
Construction of motive-power engines	422	15th Feb. 1867	Robert Shaw.
Lubricating apparatus (*for steam-engines.*)	467	21st Feb. 1867	William Sutton Gamble.
Machinery for obtaining and applying motive-power. (*Communicated by Gustav Odemar.*)	472	21st Feb. 1867	Edward Griffith Brewer.
Motive-power engines	474	21st Feb. 1867	John Weems. Thomas Robertson.
Improvements in railway engines and carriages, and in railways applicable for the purpose of locomotion on inclines, and also for retarding and stopping such engines and carriages. (*Communicated by Pierre Ambjorn, Comte de Sparre.*)	493	22nd Feb. 1867	Michael Henry.
Improvements in tilling and cultivating land by steam power, and in machinery or apparatus for such purposes. (*traction engines.*)	497	23rd Feb. 1867	John Phillips-Smith.
Motive-power engines to be worked by water, steam or other fluid, and applicable to pumps.	498	23rd Feb. 1867	Henry Purnell.
An improved lubricator or tallow cup (*for steam-engines.*)	507	23rd Feb. 1867	John Bates.
Steam-engines	527	27th Feb. 1867	Clement Martin.
An improved steam driving wheel for imparting rotary motion to shafts.	536	27th Feb. 1867	William Stobbs.
Steam and gas engines (*Communicated by Charles E. Emery.*)	571	28th Feb. 1867	Alfred Vincent Newton.
Condensing steam-engines	586	2nd March 1867	John Wild the younger.
Manufacture of packing for the joints of steam-engines, pumps and for other purposes. (*Communicated by Morris Botticher.*)	613	5th March 1867	George Haseltine.
Steam-engines and pumps (*Communicated by Hart Foster Pease.*)	621	6th March 1867	John Garrett Tongue.
Bearings for railway axles (*for locomotive engines.*) (*Communicated by Claes Adelskold.*)	672	9th March 1867	Lorentz Tidén.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
STEAM-ENGINES—*continued.*			
Valves for steam-engines and other purposes -	703	12th March 1867	Bernard Peard Walker.
Slide valves of steam-engines - - -	718	13th March 1867	Justin Thèvenet.
Construction and arrangement of steam-engines for the propulsion of boats and other vessels.	747	15th March 1867	Edward Pelleu Plenty.
Rotary engines and pumps - - - - (*Communicated by Dexter Davis Hardy.*)	755	15th March 1867	William Robert Lake.
Slide valve gear for steam-engines - - -	759	16th March 1867	John Milner.
Steam-engines and boilers - - -	771	16th March 1867	Edward Ellis Allen.
Process of and apparatus for cleaning waste and other substances, and preventing the adhesion of sediment in steam-boilers and pipes. (*lubricating pistons and cylinders.*)	774	18th March 1867	John Smith.
Improvements applicable to steam-boilers and engines, for economizing fuel in the generation of steam, and in the apparatus connected therewith.	783	19th March 1867	John Robinson.
Valve gear of steam-engines - - - (*Communicated by William Wright.*)	882	26th March 1867	William Edward Newton.
Engines worked by steam, water and other fluids and gases under pressure.	904	28th March 1867	William Bryer Nation.
An improved system of tank locomotive engine -	977	2nd April 1867	Jean Jacques Meyer. Adolphe Meyer, junr.
Railways and railway engines - - -	1016	4th April 1867	Barnard Fowler. David Greig.
Valve seats - - - - -	1066	10th April 1867	James Robert Napier. William John. Macquorn Rankine.
Oscillating steam-engines - - -	1124	16th April 1867	Daniel Rankin.
Motive-power engines - - - -	1164	22nd April 1867	John Peebles.
Steam-engines - - - - (*Communicated by Frederick W. Gordon.*)	1203	25th April 1867	John Millward.
Construction of motive-power engines - -	1225	27th April 1867	Thomas Paton.
Improvements in locomotive and traction engines, applicable also to the raising of heavy bodies. (*Communicated by Theodore Krausch.*)	1285	2nd May 1867	John Henry Johnson.
Slide valves of steam-engines - - -	1306	4th May 1867	Justin Thèvenet.
Valves for regulating the flow of liquids, gases and other elastic fluids. (*to replace slide valves.*)	1335	7th May 1867	Eugène Bourdon.
Hydraulic valve gear for steam and analogous engines.	1348	7th May 1867	Norman Willis Wheeler.
Construction and packing of slide valves and adjacent parts for steam and other engines.	1350	7th May 1867	Norman Willis Wheeler.
Apparatus for introducing and controlling the introduction of fluids to surface condensers of steam-engines.	1351	7th May 1867	Norman Willis Wheeler.
An improved mode of lubricating the stuffing-boxes of steam-engines and pumps, and of rendering the packing for such or other machines or apparatus waterproof and more durable than heretofore. (*Communicated by Abraham Littlewood, Francis W. Bloodgood and Henry Dirks Ostermoor.*)	1378	9th May 1867	William Edward Newton.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
STEAM-ENGINES—*continued.*			
Rotary engines - - - - - (*Communicated by Freidrich August Vogelsang.*)	1383	10th May 1867	Frederick Bernard Dœring.
Valves for steam and other fluids - - (*for steam-engines.*)	1384	10th May 1867	William Bracewell. William Pickup. Benjamin Lund.
Rotary engines - - - - -	1398	11th May 1867	George Fitzjames Russell.
Slide valves - - - -	1479	18th May 1867	Charles William Dixon.
Rotatory engines and pumps - - -	1529	22nd May 1867	Ebenezer William Hughes. Thomas Howard Head.
Improvements in the production of motive-power and in the apparatus connected therewith. (*air and steam.*) (*Communicated by Jacques Belou.*)	1575	28th May 1867	Henri Adrien Bonneville.
Marine and other steam-engines on the high and low pressure compound principle.	1596	29th May 1867	Henry Turner.
A new or improved engine or machine for obtaining and applying motive-power.	1604	30th May 1867	James Francombe.
Steam-engines - - - -	1661	6th June 1867	Edward Bland.
An improved mode of obtaining motive-power -	1787	19th June 1867	Francis William Waide.
Rotary engines and pumps - - -	1791	19th June 1867	Ebenezer William Hughes. Thomas Howard Head.
Improvements in buckets for pumps, especially suitable for pumps for mines, and in pistons for steam and other engines.	1821	21st June 1867	Francis Reddicliffe.
Construction of motive-power engines and pumps	1822	21st June 1867	Emory M^cClintock.
Steam-engines - - - -	1865	26th June 1867	Alexander Caesar Frederick Franklin.
Self-acting escape or relief valves applied to the cylinders of steam-engines - -	1940	3rd July 1867	Walter Samuel Scott. William Henry Steel.
Motive-power engines - - - -	1941	3rd July 1867	Robert Shaw.
Steam-engines - - - - -	1966	4th July 1867	Hamilton Ruddick.
Improvements in or applicable to steam and other motive engines.	1974	6th July 1867	Walter Charles Church.
Rotary engines and rotary pumps - - -	1984	6th July 1867	William Archer.
Traction engines or road locomotives - -	1999	8th July 1867	Nathaniel Clayton. Joseph Shuttleworth.
Slide valves suitable for steam-engines - -	2001	8th July 1867	Nathaniel Clayton. Joseph Shuttleworth.
Marine steam-engines - - - -	2003	9th July 1867	John M^cFarlane Gray.
An improved method of conveying the rotary motion to axles of steam-engines, and all machines and carriages where cranks are used.	2036	11th July 1867	Kenelm John Winslow.
Steam-engines - - - -	2101	17th July 1867	John Russell Swann.
Improvements in the lateral action or induction of fluids, and in the apparatus or mechanism employed therefor.	2106	18th July 1867	Alexander Morton.
Steam-engines - - - - -	2169	26th July 1867	Jonathan Edge.
Improvements in machinery or apparatus for raising or forcing water or other fluids, and for the transmission of the motive-power of water, steam or other fluid or gases - - - -	2278	7th Aug. 1867	Francis Carr Marshall. Hugh Stewart.
Certain improvements in steam-engines - -	2284	8th Aug. 1867	George Holcroft. William Nathan Dack.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
STEAM-ENGINES—*continued.*			
Improvements in or applicable to slide valves for admitting the flow or passage of steam, water or other fluids and gases when pressed - -	2300	10th Aug. 1867	John Davenport. John Kitson.
Slide valves - - - - -	2402	22nd Aug. 1867	Thomas Sault.
Apparatus for raising water or other liquids by steam power. (*Communicated by William Lewis Horne.*)	2408	22nd Aug. 1867	Alexander Melville Clark.
Construction of locomotive traction engines -	2456	28th Aug. 1867	Robert Edwards.
Machinery for boring, cutting or working in rock, coal and other mineral.	2503	4th Sept. 1867	Frederick Bernard Dœring.
Carrying passengers through the air by a steam bird or flying steam-engine fitted with wings flapped by the action of steam.	2504	4th Sept. 1867	John Kinnersley Smythies.
Steam-engines - - - -	2535	7th Sept. 1867	James Armstrong. Edwin Eccleston.
An improved rotary steam or gas engine, also applicable for pumping and measuring liquids.	2536	7th Sept. 1867	Emile Hubner.
Construction of stuffing-boxes, slide valves and steam jacketings.	2556	10th Sept. 1867	John Jordan.
A mode of increasing the efficiency of steam for motive-power purposes. (*Communicated by John Blake Tarr.*)	2600	14th Sept. 1867	William Edward Newton.
Improvements in and applicable to slide valves -	2625	18th Sept. 1867	Thomas Adams. George John Parson.
Steam-engines - - - -	2713	26th Sept. 1867	John Wood. Benjamin Wood. Richard Wood.
Locomotive engines and their permanent ways -	2755	30th Sept. 1867	John Clark.
An improved steam-engine - - -	2806	5th Oct. 1867	Alfred Morgan Gillham.
Slide valves of steam-engines - - -	2812	7th Oct. 1867	Jacob Goodfellow.
Improvements in locomotive engines, vehicles and appendages thereto, for better and safer working on railways, tramways and common roads.	2907	17th Oct. 1867	William Bridges Adams.
An improved mode of and means for preventing the bursting of the tubes in steam and water pressure gauges, and other tubes or pipes, from the effects of cold. (*Communicated by Ernest Dubois.*)	2925	18th Oct. 1867	Edward Caspar.
Locomotive engines - - - -	3023	26th Oct. 1867	William Kendall.
Improvements in the manufacture of circular webbing or gasket, applicable as packing for steam-engines, as covering for telegraph cables and other useful purposes, and in the machinery employed therein.	3046	29th Oct. 1867	Joseph Threlfall Carter.
Improvements in actuating the valves of water and other meters, and of engines for obtaining motive-power.	3050	29th Oct. 1867	Loftus Perkins.
Improvements in rotary engines applicable as motors, pumps, meters and for other purposes, also in indicators applicable to such and other engines or meters and other purposes. (*Communicated by Arthur Perry Emery.*)	3219	13th Nov. 1867	Alfred Vincent Newton.
Construction of locomotive engines for mountain rail or tramways.	3221	14th Nov. 1867	Robert Francis Fairlie.
Motive-power engines - - - -	3279	19th Nov. 1867	Andrew Barclay.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
STEAM-ENGINES—*continued.*			
Traction engines	3280	19th Nov. 1867	Edward Trevythan Trenery.
Packing for the piston heads of steam cylinders (*Communicated by Horace M^c^Murtrie.*)	3293	21st Nov. 1867	William Robert Lake.
Improvements in steam and other motive-power engines and in valves for engines	3299	21st Nov. 1867	William Robert Green. John George Freeman.
Rotary engines and pumps	3304	21st Nov. 1867	Ebenezer William Hughes.
Improvements in gibs applicable to the cross heads and other parts of engines and other machinery, also in the means employed for lubricating the same and other sliding or frictional surfaces. (*Communicated by William Armstrong Devon.*)	3309	22nd Nov. 1867	John Garrett Tongue.
Marine steam-engines	3320	23rd Nov. 1867	William Macnab.
An improved construction of rotary steam-engine (*Communicated by William Owen.*)	3334	25th Nov. 1867	Alfred Vincent Newton.
Certain improvements in steam-engines	3379	28th Nov. 1867	Edward Wood.
An improved brake-washer (*for steam-engines.*) (*Communicated by Arthur Dillon-Corneck.*)	3399	30th Nov. 1867	William Edward Gedge.
Valves for steam-engines	3421	2nd Dec. 1867	William Black. Thomas Hawthorn.
Improvements in steam winches, which are also applicable to other similar purposes. (*applicable to steam-engines.*) (*Communicated by Joseph Corradi.*)	3425	2nd Dec. 1867	George Breen.
Portable and other steam-engines and boilers	3439	3rd Dec. 1867	William Brown. Charles Neale May.
Condensers	3470	5th Dec. 1867	Edmund Alfred Pontifex.
Improvements in elastic packings for the pistons of steam-engines and for other purposes, and in the machinery employed in the manufacture of such packings.	3495	9th Dec. 1867	Edward Keirby.
An improved rotary water or steam motive-power engine.	3508	10th Dec. 1867	William Bradshaw Leachman.
Certain improvements in steam-engines	3512	11th Dec. 1867	George Holcroft. William Nathan Dack.
An improved equilibrium slide valve for steam-engines	3528	12th Dec. 1867	Richard Roberts. Philip Williams.
Steam cylinders and the peculiar arrangement of the mechanism connected therewith.	3530	12th Dec. 1867	Noah Paxman, jun^r^.
Engines actuated by air, steam or other fluids	3576	16th Dec. 1867	George Dominicus Kittoe.
Means of and apparatus for obtaining and applying hydrogen gas to the furnaces of steam-engines, boilers, and kilns for the manufacture of bricks and lime.	3580	16th Dec. 1867	James Standfield.
Construction of rotary engines	3648	23rd Dec. 1867	Simon Salter.
Improvements in motive-power engines, part of which improvements are applicable to the arrangement and construction of pumps for raising and forcing liquids, fluids and other substances generally.	3656	24th Dec. 1867	Christopher Pottinger.
Metallic pistons for steam cylinders, air cylinders or pumps.	3685	28th Dec. 1867	Jacob Goodfellow.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
STEAM-ENGINES—*continued.*			
Construction of steam-engines and boilers - -	3709	31st Dec. 1867	Thomas Messenger.
See also "GAUGES."			
" " "GOVERNORS."			
STEERING OR GUIDING SHIPS, CARRIAGES, PLOUGHS, &c.			
Improvements in the construction of ships and other navigable vessels and in the mode of rigging, propelling and steering the same, including children's toy ships.	95	14th Jan. 1867	Robert Atkin.
Certain novel and improved combinations and arrangements of differential wheel gearing, and its application to various purposes - - (*for steering.*)	125	18th Jan. 1867	Charles Frederick Cooke. John Standfield.
Tramways and carriages for streets and ordinary roads. (*guiding the wheels.*)	232	29th Jan. 1867	John Haworth.
An improved apparatus for transmitting power - (*for steering.*)	248	30th Jan. 1867	Thomas Charles Entwistle.
Common road traction engines - - - (*Communicated by Albert Schmid.*)	267	31st Jan. 1867	John Henry Johnson.
Engines and machinery employed in tilling land - (*steering frame.*)	300	2nd Feb. 1867	David Greig. Robert Burton. Frederick Parker.
Improvements in steering apparatus and in machinery for stopping, starting and reversing heavy steam-engines.	559	28th Feb. 1867	Andrew Betts Brown.
Steering apparatus - - - - -	764	16th March 1867	Guybon Hutson.
Steam road rollers - - - - -	796	19th March 1867	Thomas Aveling.
An improved mode of hanging ships' rudders - (*Communicated by Henry Harris Pember and Uriah Furman Rogers.*)	956	30th March 1867	Henri Adrien Bonneville.
Improvements in apparatus to be used for towing ships or vessels, and in apparatus for laying submarine telegraph cables. (*or steering ships.*)	1015	4th April 1867	James Maze Kilner.
Rudder pins and gudgeons - - -	1108	13th April 1867	Charles Grace.
Improvements in the construction of landing stages and iron ships or vessels, also in propelling and steering ships or vessels generally.	1309	4th May 1867	Evan Leigh.
Improved mechanism for the propulsion of carriages on turnpike and other like roads, by manual power. (*and guiding.*)	1322	6th May 1867	Kenelm John Winslow.
Improvements in steam rollers for rolling roads and in pitch chains for working the same and for other purposes.	1500	20th May 1867	David Thomson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
STEERING SHIPS, &c.—*continued.*			
Improvements in the construction of a steam vessel suitable for ferrying laden trains across the ocean, complete, together with its landing-places, breakwaters, and modes of protection from marine insects and fouling, which improvements are also generally applicable to other vessels, and to the protection of iron and wood exposed to the action of the sea water.	1503	21st May 1867	Edward Henry Cradock Monckton.
An improved combined ship's propeller and steerer (*Communicated by Frank G. Fowler.*)	1963	4th July 1867	Alfred Vincent Newton.
An improved rudder especially adapted for barges -	2118	19th July 1867	Pren Henry Metham.
Propelling and steering vessels - -	2205	30th July 1867	Charles Mayo.
Apparatus or gearing for steering ships - -	2423	24th Aug. 1867	George Allibon. Edward Wilson.
Improved steering apparatus - - - (*Communicated by Thomas William Murray.*)	2467	29th Aug. 1867	William Edward Newton.
Signalling and indicating apparatus - - (*applied to steering apparatus.*)	2468	29th Aug. 1867	Arthur McNutt Wier. Marshall Arthur Wier.
Rudders - - - - - (*Communicated by Thomas William Murray.*)	2469	29th Aug. 1867	William Edward Newton.
Fitting ships' rudders - - - -	2555	9th Sept. 1867	John Medhurst.
Construction and mode of propelling and maneuvering floating batteries and other vessels intended for the purposes of naval defence and attack. (*and steering.*)	2743	28th Sept. 1867	John Elder.
Improvements in transmitting motive-power and in mechanism or apparatus employed therefor - (*for steering ships.*)	3066	31st Oct. 1867	James Tennant Caird. Stewart Robertson.
Steering apparatus - - - - (*Communicated by Henry Franklin Shaw.*)	3231	14th Nov. 1867	William Robert Lake.
Traction engines - - - -	3280	19th Nov. 1867	Edward Trevythan Trenery.
For Ships' Compasses, *see* "COMPASSES."			
STONE AND SLATE, ARTIFICIAL STONE AND MARBLE; GRINDSTONES AND MILLSTONES.			
Improvements in the mode of and apparatus for manufacturing beton, and in the method of applying beton for certain constructive or structural purposes. (*Communicated by François Coignet.*)	77	11th Jan. 1867	Michael Henry.
An improved machine for cleaning and polishing the surface of glass, marble, metal and other smooth surfaces.	462	20th Feb. 1867	Robert Kunstmann.
Improvements in machinery for cutting, shaping and polishing mouldings and shapes of circular, oval or irregular curved forms in stone, wood or other materials, part of such improvements being applicable for veneering mouldings of similar forms.	604	4th March 1867	Robert Thompson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
STONE, &c.—*continued.*			
Machinery for crushing stones, minerals and other like substances - - - - -	680	9th March 1867	Benjamin Walker. John Frederick Augustus Pflaum.
Lithographic stone grinding, graining, polishing, and ink and colour grinding apparatus.	775	18th March 1867	Thomas William Nicholson.
Machinery for manufacturing flour - - (*dressing grindstones.*) (*Communicated by John Brown, Alexander Hart, Allen Battey Ralph, James Hobart Cutler and Dexter Neuton Knight.*)	838	22nd March 1867	George Tomlinson Bousfield.
Machinery for cutting channels in stone and for working in quarries. (*Communicated by George Jeffards Wardwell.*)	864	25th March 1867	William Edward Newton.
An improved artificial stone for grinding, whetting or polishing purposes, and a process for producing the same.	1000	3rd April 1867	George Edward Van Derburgh.
Machinery for grinding and polishing metal and other surfaces.	1105	13th April 1867	William Gregory.
Apparatus for breaking down coal, stone and other minerals. (*Communicated by Theophile Guibal.*)	1137	17th April 1867	William Cochrane.
Bowls, jugs, and all kinds of covered and uncovered articles or vessels made of glass, china, stone or earthenware and other plastic materials.	1174	23rd April 1867	Elisha Leigh.
Improvements in cutting and dressing millstones, and in apparatus to be employed for such purpose. (*Communicated by Samuel Golay.*)	1245	30th April 1867	George Davies.
Apparatus used in getting coal, stone and other minerals - - - - - (*see* "MINING.")	1311	4th May 1867	Theophilus Wood Bunning. William Cochrane.
Manufacture of artificial granite and other artificial bricks and blocks suitable for buildings, engineering structures, pavements and other similar purposes. (*Communicated by Pierre Rodolphe Pozzi.*)	1458	17th May 1867	Perceval Moses Parsons.
Improved paving for roads and ways - - - (*cementing stones into slabs.*)	1476	18th May 1867	Bernardo Sheil.
Mining, tunnelling and stone dressing machines, and valve motion therefor. (*Communicated by Richard Channing More Lovell.*)	1566	27th May 1867	William Snell.
Construction of walls, buildings and other similar structures. (*forming blocks of artificial stone.*)	1639	3rd June 1867	Samuel Harwood.
Improved apparatus for boring or perforating rocks, metals or other substances. (*Communicated by Horric de la Roche Tolay.*)	2027	10th July 1867	William Edward Newton.
An improved machine for cutting slate in quarries previous to laying them open, and for cutting in coal pits, mines and stone quarries. (*Communicated by Joseph Debry.*)	2177	27th July 1867	William Edward Gedge.
Improvements in the manufacture of wheat and other grain into flour, and in the machinery connected therewith.	2291	9th Aug. 1867	Thomas James Baker.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
STONE, &c.—*continued.*			
Improvements in machinery used in cutting coal, stone, slate and other minerals, and in forming tunnels and galleries, and for other quarrying purposes.	2451	28th Aug. 1867	John Elliott.
An improved manufacture of tool for cutting stone. (*Communicated by William Shaw Campbell.*)	2485	2nd Sept. 1867	Alfred Vincent Newton.
Machinery for polishing, grinding and edging slabs of marble, slate and other minerals. (*Communicated by Stinson Hagaman.*)	2572	11th Sept. 1867	Alexander Melville Clark.
Improvements in machinery or apparatus for cutting or working rocks and other hard substances, chiefly designed for mining, tunnelling and other like operations. (*Communicated by Herman Haupt.*)	2607	16th Sept. 1867	James Asbury McKean.
Apparatus for boring holes in stone, shale and minerals - - - - - - - -	2830	8th Oct. 1867	Francis Love. William Armstrong. Levi Widdowson.
Mounting and driving millstones - - -	2842	9th Oct. 1867	Richard Smith, junior.
Manufacture of grindstones and other blocks or forms of artificial stone - - - - -	3193	11th Nov. 1867	Frederick Ransome. Henry Bessemer. Ernest Leslie Ransome.
Manufacture of artificial granite suitable for buildings, engineering structures, pavements and other similar purposes. (*Communicated by Pierre Rudolph Pozzi.*)	3234	15th Nov. 1867	Perceval Moses Parsons.
An improved tool to be used for cutting rocks or stone and other similar substances. (*stone for building.*)	3311	22nd Nov. 1867	Archibald Munro.
Improvements in machinery for cutting or dressing stone and in apparatus connected therewith.	3354	27th Nov. 1867	Charles Coates.
Means or apparatus for effecting the cutting or dressing of stone - - - - -	3571	16th Dec. 1867	Joseph Booth. John Booth. Jeremiah Booth.
An improved mode of accelerating the induration of certain descriptions of concrete or artificial stone. (*Communicated by Johann Georg Wilhelm Picker.*)	3708	31st Dec. 1867	Marc Antoine François Mennons.
For Preserving Stone, *see* "PRESERVING WOOD." For Breaking Stones, *see* "GRINDING MINERALS."			
STRAPS, DRIVING-BANDS AND BELTS.			
Manufacture of leather straps and driving bands -	357	8th Feb. 1867	Michael John Haines.
Fastenings for driving and other belts or bands - (*Communicated by John Ashton Greene.*)	530	26th Feb. 1867	Alfred Vincent Newton.
An improved belt hook or fastener for piecing driving and other belts or bands. (*Communicated by Frederick Greenleaf Wilson.*)	760	16th March 1867	William Randal Harris.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
STRAPS, &c.—*continued.*			
"Banding" for driving the spindles of machines used for spinning, doubling and twisting cotton, wool, flax, silk and other fibrous materials.	877	26th March 1867	Thomas Unsworth.
Buckles or similar fastenings for braces, belts, straps or bands.	1074	11th April 1867	Richard Couchman.
Improvements in the manufacture of elastic cords or bands applicable to various purposes, such as for driving bands, blind cords, and other analogous purposes in which a certain degree of elasticity is required.	1133	17th April 1867	Archibald Turner.
An improved fabric for the manufacture of machine belting and for other purposes. (*Communicated by Zenas Marshall Crane and James Brewer Crane.*)	1524	22nd May 1867	Alexander Melville Clark.
Manufacture of ornamental chains and bands -	1622	31st May 1867	James Lancelott.
Mode of removing and cutting the hides of animals for the manufacture of driving bands or tubes of leather. (*Communicated by Alois Eschenlohr.*)	2471	30th Aug. 1867	Alexander Melville Clark.
Improved means of joining leather or other material in the constructing or repairing of straps or driving belts for machinery.	3097	4th Nov. 1867	William Dickinson.
An improved artificial compound chiefly designed for use as a substitute for india-rubber or caoutchouc. (*for belting.*) (*Communicated by Austin Goodyear Day.*)	3108	4th Nov. 1867	William Robert Lake.
An improved method of transmitting motive-power to potters' wheels, lathes, jiggers, and other similar machinery for the manufacture of pottery and other articles made from clay. (*endless band.*)	3319	23rd Nov. 1867	William Boulton.
Construction of couplings for driving belts - -	3650	23rd Dec. 1867	William Henry Chase, junior.
SUGAR AND SYRUPS; GLUCOSE.			
Apparatus for evaporating and concentrating cane juice and other juices and liquids. (*Communicated by George Brocklehurst.*)	5	1st Jan. 1867	Michael Henry.
Apparatus for evaporating and boiling saccharine liquors.	22	3rd Jan. 1867	Walter Knaggs.
Manufacture and refining of sugar - - (*Communicated by Jules Emile Boivin and Désiré Loiseau.*)	54	8th Jan. 1867	John Henry Johnson.
Improvements in apparatus for expressing or extracting liquids from substances containing the same, and in the manufacture of a fabric employed therein. (*juice from beet-root pulp.*) (*Communicated by Theodore Poizot and Alphonse Druelle.*)	531	26th Feb. 1867	Clinton Edgcumbe Brooman.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SUGAR, &c.—*continued.*			
Centrifugal sugar machines - - - (*Communicated by Alexander Mackey and Eberhard Müller.*)	980	2nd April 1867	William Edward Newton.
Certain improvements in apparatus employed in the process of refining sugar.	1099	13th April 1867	John Aitken.
An improved feeder or hopper for centrifugal sugar machines. (*Communicated by Helem Merrill.*)	1177	23rd April 1867	William Robert Lake.
An improved mode of and apparatus for removing the contents from centrifugal sugar machines. (*Communicated by Helem Merrill.*)	1178	23rd April 1867	William Robert Lake.
An improved mode of and apparatus for sprinkling or diffusing liquids for refining sugar and other purposes. (*Communicated by Helem Merrill.*)	1179	23rd April 1867	William Robert Lake.
Manufacture of sugar - - - - (*Communicated by Louis Joseph Frédéric Margueritte.*)	1254	30th April 1867	Alexander Melville Clark.
Evaporators for concentrating saccharine fluids -	1416	13th May 1867	William Edmond de Bourran.
A new or improved machine or apparatus for filling sacks with grain, flour, bran, sugar, and other granular or pulverous substances. (*Communicated by Auguste Hourdain.*)	1492	20th May 1867	Charles Denton Abel.
Machinery or apparatus for separating liquids or moisture from substances, and also for revivifying and cooling animal charcoal and other substances, and for treating sugar.	1605	30th May 1867	William Orr.
Improvements in machinery or apparatus for separating liquids or moisture from substances, and also for revivifying and cooling animal charcoal and other substances, and for treating sugar.	1707	10th June 1867	William Orr.
Manufacture of coal vases, buckets, casks, kegs, bins, baths, sugar funnels and other similar articles of hollow ware.	1786	19th June 1867	David Jones.
A new metallic zinc paint - - - - (*and alloys used as sugar filters.*)	1845	25th June 1867	James Webster.
Filtering apparatus - - - - (*for sugar refineries.*) (*Communicated by Albert Ludwig Georg Dehne.*)	1860	26th June 1867	William Edward Newton.
Manufacture of refined sugar - - - (*Communicated by Edward Peers Eastwick.*)	2034	11th July 1867	John Henry Johnson.
Improved processes and apparatus to be used in the manufacture of sugar, and in sawing, cutting or forming the same into cubes for use.	2213	31st July 1867	George Gordon.
Improvements in the method of and apparatus for clarifying sugar, which improvements are also applicable to other similar purposes. (*Communicated by Benjamin Lawrence and Phineas Lawrence.*)	2237	2nd Aug. 1867	Edwin Thomas Marler.
An improvement in centrifugal apparatus for washing sugar. (*Communicated by George E. Evans.*)	2319	13th Aug. 1867	George Davies.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SUGAR, &c.—*continued.*			
Improvements in apparatus applicable to the conversion of cereal and vegetable substances into saccharine matter, in treating and purifying saccharine substances extracted from malt, fruits and vegetables, in treating fatty matters, and in the manufacture of chemical products -	2760	1st Oct. 1867	George Allibon. Alexandre Manbré.
Apparatus for separating soluble from insoluble matters, filtering the solutions, and if wished distilling these latter or parts of them. (*extracting sugar from beetroot.*)	2863	11th Oct. 1867	Eduard Leitenberger.
Cooling or refrigerating water - - -	2944	19th Oct. 1867	John Schwartz.
Improved modes of and means for curing, drying, preserving and packing meat, fruit, vegetables and other perishable substances. (*cooling cane juice, &c.*) (*Communicated by Daniel E. Somes.*)	3006	25th Oct. 1867	William Robert Lake.
Evaporators for concentrating saccharine fluids -	3031	28th Oct. 1867	William Edmond de Bourran.
An improved sprinkler for powdered substances - (*sugar.*) (*Communicated by George Jones.*)	3374	28th Nov. 1867	Edward Thomas Hughes.
An improved mode of and means for clarifying saccharine solutions. (*Communicated by Joseph Edward Freund.*)	3405	30th Nov. 1867	William Robert Lake.
Means for filtering syrup in the manufacture of sugar. (*Communicated by Joseph Edward Freund and Helem Merrill.*)	3417	2nd Dec. 1867	William Robert Lake.
Machinery or apparatus for cutting or breaking sugar.	3461	5th Dec. 1867	Joseph Green.
Treating sugar syrup - - - - -	3574	16th Dec. 1867	James Dawson.
An improved mode of and apparatus for evaporating liquids with a view to obtaining the saccharine, saline or other substances contained therein, in a dry or crystalline state.	3721	31st Dec. 1867	Robert Tooth.
SULPHUR.			
Utilizing a certain description of clay and a substance usually found therewith. (*obtaining preparations of sulphur.*)	551	27th Feb. 1867	Alexander McDougall.
An improved mode of treating small pyrites and pyrites' dust so as to obtain sulphur therefrom.	789	19th March 1867	Christian Allhusen.
Extraction and separation of the sulphur contained in products resulting from the alternate exposure of certain metallic oxides to gases containing sulphuretted hydrogen and to oxygen.	2314	12th Aug. 1867	Arthur McDougall.
Treating the oxide of iron residues of gas purifying in order principally to extract sulphur therefrom.	2618	17th Sept. 1867	Thomas Bell.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SULPHUR—*continued.*			
Improvements in decomposing the sulphides of copper, silver, nickel, cobalt, lead, barium, strontium and calcium, and in obtaining copper, sulphur and other products - - -	3232	14th Nov. 1867	John Clark. Alexander Esilman.
SURGERY, SURGICAL INSTRUMENTS, SPLINTS AND BANDAGES, TRUSSES FOR HERNIA; ARTIFICIAL LIMBS, INVALID FURNITURE.			
An improved portable folding chair - - (*for invalids.*)	6	1st Jan. 1867	Henry Alfred James.
An improved pneumatic apparatus for the treatment of diseases in an attenuated atmosphere. (*Communicated by George Hadfield.*)	55	8th Jan. 1867	William Edward Newton.
Artificial legs - - - - - (*Communicated by Alexander Tough Watson.*)	63	9th Jan. 1867	Alfred Vincent Newton.
Apparatus used when probing for balls or projectiles	98	14th Jan. 1867	Sylvan de Wilde.
Infants' feeding bottles and breast exhausters -	207	26th Jan. 1867	Joseph Nodder.
An improved process of preparing raw hide for the manufacture of various articles. (*splints.*)	394	12th Feb. 1867	William Henry Towers.
Improved apparatus to be used as spinal, abdominal and pelvic truss supports. (*Communicated by Edmund Prior Banning.*)	569	28th Feb. 1867	William Edward Newton.
A new and useful fabric for elastic stockings, stays or corsets, bandages and other similar and analogous articles.	592	2nd March 1867	Anne Catherine Laurys.
A new and useful process whereby leather, wholly or partially tanned, or animal tissue of any nature, is made hard, semi-elastic and transparent. (*for making splints.*)	651	7th March 1867	William Henry Towers.
Preparation of buffalo horn as a substitute for whalebone. (*for surgical bandages.*)	1159	20th April 1867	John Boyles Roby.
Construction of tents by lacing instead of buttoning as heretofore, and transforming the same into ambulances to carry crippled and wounded men. (*Communicated by Alfred Varnier.*)	1209	26th April 1867	James Archibald.
Hernia trusses, abdominal supporters and surgical bands. (*Communicated by William Pomeroy.*)	1475	18th May 1867	Charles Pomeroy Button.
Artificial limbs - - - - - (*Communicated by Amasa A. Marks.*)	1663	6th June 1867	Thomas Brown.
Application of plastic and fibrous materials to the manufacture of moulded or formed articles. (*splints.*)	1700	10th June 1867	John Macintosh.
Easy or invalid chairs - - - -	1805	20th June 1867	John Ward. Frederic Dressler
Surgical appendages, to consist of a corset and abdominal supporter combined, also to serve as a truss in cases of umbilical and ventral hernia.	1843	25th June 1867	Thomas Pebardy.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SURGERY, &c.—*continued.*			
An improved process of embalming and preserving animal substances from decay, for anatomical purposes.	1850	25th June 1867	Ludovico Brunetti.
An improved apparatus for winding bands or tapes - - - - - - (*surgical bandages.*)	1872	27th June 1867	John Cash. Joseph Cash.
A process to prepare and preserve paper and tissues with a solution of perchloride of iron, intended for stopping the bleeding of wounds.	2006	9th July 1867	Gustave Gabillon.
Improvements in fire-escapes, the same being suitable for ascending and descending mines or other deep places, and at other times convertible into a piece of furniture, such as a couch, ottoman, chair, table or other similar article. (*useful for lowering invalids.*)	2069	13th July 1867	John Scott.
An improved system of dispensing medicines and preparing drugs therefor, together with an improved portable miniature dispensary and instrument case applicable to such system.	2239	2nd Aug. 1867	Edmund Adolphus Kirby.
An improved combined bed, couch and chair for the use of invalids.	2338	14th Aug. 1867	Christopher Fabian Bower.
Certain improvements in hoods or coverings for "perambulators," "bath chairs," carriages and other vehicles.	2362	17th Aug. 1867	Alexander Leveson.
A new or improved material to be used as a substitute for oiled silk, bladders, gut-skins, india-rubber, and other waterproof materials and leather. (*for splints.*)	2604	14th Sept. 1867	John Jeyes.
Method of and materials for manufacturing ammunition boxes, pontoons, baggage and other waggons and carriages, and various equipments for military, naval and civil purposes. (*cases for surgical instruments.*)	2630	19th Sept. 1867	Thomas Charles Clarkson.
An improved mode of preparing iron for the manufacture of various articles where great strength and capability of resistance to tensile strain or torsion is required. (*for surgical instruments.*) (*Communicated by Michel Pawlowitch Lwoff.*)	2865	11th Oct. 1867	William Edward Newton.
Certain improvements in hoods or coverings for perambulators, bath chairs, carriages and other vehicles.	2910	17th Oct. 1867	Edward Shaw.
An articulated artificial leg - - - (*Communicated by Doctor William Becker.*)	2957	21st Oct. 1867	Alexander Horace Brandon.
Improved apparatus for treating fractures of the limbs.	2979	23rd Oct. 1867	Christopher Samuel Jeaffreson.
An improved apparatus for protecting the eyes from wind, dust, snow and the inclemency of the weather.	3116	5th Nov. 1867	Henry Adeane.
An improvement in the construction of easy-chairs, settees, sofas, seats for railway and other carriages, and invalid hospital couches or carriages - - - - -	3412	2nd Dec. 1867	Thomas Finer Widenham. John Reynolds.
Certain improvements in the manufacture of waterproof or liquid-proof paper or glazed paper or fabrics. (*for surgical bandages.*)	3437	3rd Dec. 1867	John Thorpe.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
SURGERY, &c.—*continued.*			
Orthopedic apparatus for the prevention and treatment of spinal diseases. (*Communicated by Mademoiselle Victorine Leneveu.*)	3493	7th Dec. 1867	Alexander Melville Clark.
Treatment of gutta-percha, indian-rubber, Honduras gum, and the other allied gums, for the production of a preparation or preparations applicable as a varnish, cement, paint, stain, water and air-proof material, solid or elastic material and for other purposes. (*for surgery.*) (*Communicated by Daniel Reed.*)	3542	13th Dec. 1867	Edward Reed Sintzenich.
Surgical appendages, to consist of a corset and abdominal supporter combined, also to serve as a truss in cases of umbilical and ventral hernia.	3551	13th Dec. 1867	Thomas Pebardy.
TAR AND RESIN.			
Improvements in the treatment of the residual matters resulting from and obtained in the purification and distillation of mineral or hydrocarbon oils, and also in the treatment of coal tar and various waste or other alkaline and lime substances, for the purpose of utilizing the same.	211	26th Jan. 1867	John James Lundy.
Burning petroleum, creosote, gas tar, and other such fluid bodies capable of being used as fuel. (*see* "FUEL.")	998	3rd April 1867	John Augustus Bouck.
Improvements in the manufacture of phosphorus, and in economizing residual products of the said manufacture. (*separating tar.*)	1064	10th April 1867	Jacob Hort Player.
A process of uniting or cementing and compressing sawdust, shavings and other small particles of wood, for the purpose of converting the same into charcoal, and utilizing the naphtha, tar and other residuary products of such conversion.	1983	6th July 1867	William Harris.
TELEGRAPHS (*Electric*); TELEGRAPHIC PRINTING APPARATUS.			
Improvements in supports for the insulators of electric telegraphs, and in affixing the said supports to the posts of the said telegraphs.	16	3rd Jan. 1867	George Bond Smith.
Improvements in working electric telegraphs, and in the construction of the instruments and manufacture of the material employed therein. (*Communicated by Paul Antoine Marie Chauvassaignes and Jacques Paul Lambrigot.*)	181	24th Jan. 1867	Clinton Edgcumbe Brooman.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
TELEGRAPHS, &c.— *continued.*			
Electric telegraph conductors and cables - - (*Communicated by John Montgomery Batchelder.*)	212	26th Jan. 1867	John Henry Johnson.
Improvements in electric telegraphs and in apparatus connected therewith.	220	28th Jan. 1867	Charles Wheatstone.
Insulators for telegraph wires - - - (*Communicated by David Brooks.*)	632	7th March 1867	George Davies.
Improvements in the construction of electric telegraph conductors and in the method of preparing the same, also in the machinery and in the application of certain other machinery and apparatus employed therein.	694	11th March 1867	Donald Nicoll.
Certain improvements in printing telegraphs and in apparatus connected therewith.	816	21st March 1867	John Hawkins Simpson.
Electro-magnetic and magneto-electric induction machines. (*for working telegraphs.*)	842	23rd March 1867	Henry Wilde.
Construction of posts, poles and similar supports for telegraphic, agricultural or other purposes. (*Communicated by Guillaume Lichtenfelder.*)	887	26th March 1867	Charles Emile Sohn.
A new or improved optical telegraph - - (*see* "SIGNALS.") (*Communicated by Alexandre Schpakofsky.*)	908	28th March 1867	Charles Denton Abel.
An improved mode of coupling telegraph and other wires. (*Communicated by David McComb.*)	951	30th March 1867	James Jennings McComb.
Improvements in apparatus to be used for towing ships or vessels, and in apparatus for laying submarine telegraph cables.	1015	4th April 1867	James Maze Kilner.
Improvements in the insulation of subterranean electric telegraph wires, and in laying the same.	1022	5th April 1867	Thomas Beaumont Marshall.
Improvements in posts or supports particularly applicable to posts or supports for telegraph wires.	1048	8th April 1867	William Thomas Henley.
Improvements in apparatus for regulating and transmitting electric currents, more especially designed for use in connection with telegraphic recording instruments for long submarine lines.	1053	8th April 1867	George Little.
Electric telegraph apparatus - - - (*Communicated by Secondo Roos.*)	1213	26th April 1867	William Clark.
A new or improved system of and apparatus for administrative telegraphy. (*Communicated by Adolphe Bergmüller.*)	1279	2nd May 1867	Charles Denton Abel.
An improved method of and apparatus for laying and protecting underground telegraphic wires.	1307	4th May 1867	Léon Delperdange.
Improvements in telegraph posts, also applicable to ships' masts and posts or supports for other purposes - - - - -	1319	6th May 1867	Paul Haenlein. Joseph Fisher. Rowland George Fisher.
Telegraphic instruments and electric clocks -	1531	23rd May 1867	Meinrad Theiler, sen^{r}. Richard Theiler. Meinrad Theiler, jun^{r}.
Electric telegraphs - - - - -	1565	27th May 1867	Pierre Antoine Joseph Dujardin.
Galvanometers for receiving signals through submarine and other electric-telegraph lines, and for testing them.	1583	29th May 1867	David Tunks.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
TELEGRAPHS, &c.—*continued.*			
Galvanic batteries - - - - -	1654	5th June 1867	Charles Boulay.
An improvement in telegraphic insulators and in caps or shields for the same.	1720	11th June 1867	John Crisp Fuller.
Electric telegraphs - - - -	1755	15th June 1867	Cornelius Varley. Samuel Alfred Varley.
Manufacture of electric telegraphic conductors -	1770	17th June 1867	Matthew Gray.
Means or apparatus employed in examining the coating of electrical telegraphic communicators.	1771	17th June 1867	Matthew Gray.
Improvements in the manufacture of electrical telegraphic conductors and in the means or apparatus employed therein.	1772	17th June 1867	Matthew Gray.
An improved method of protecting submarine cables when placed on board ship, from injury by design or from damage by accident, and for facilitating the paying of them out.	1856	26th June 1867	Matthew Fontaine Maury.
Construction of general electric telegraphic machines and the mode of working them - - (*and printing.*)	1917	1st July 1867	François Thierry Hubert. Henry David Green Truscott.
Means or apparatus used in effecting telegraphic communications.	2015	9th July 1867	William Stratford Andrews.
Means or apparatus used in effecting telegraphic communications.	2016	9th July 1867	William Stratford Andrews.
Receiving or recording instruments for electric telegraphs.	2147	23rd July 1867	Sir William Thomson, Knight.
Insulators for telegraphic wires - - - (*Communicated by David Brooks.*)	2192	29th July 1867	George Davies.
Signalling upon railway trains, parts of which apparatus are applicable to electric telegraphs generally - - - -	2207	30th July 1867	Samuel Manley Martin. Samuel Alfred Varley.
Improvements in submarine telegraph cables and in the mode of joining the same.	2241	2nd Aug. 1867	Thomas Allan.
Improvements in electric telegraph conductors and in the means of laying and securing the same, also in the machinery and apparatus to be employed therein.	2480	31st Aug. 1867	Donald Nicoll.
Telegraphic apparatus relating especially to telegraphic "relays," "repeaters," and "commutators."	2599	14th Sept. 1867	Walter Gale Brownson.
Improvements in apparatus for testing telegraph conductors, part of the invention being applicable to other purposes.	2622	18th Sept. 1867	Frederick Henry Varley.
An improved mode of preparing iron for the manufacture of various articles where great strength and capability of resistance to tensile strain or torsion is required. (*for telegraphic wires.*) (*Communicated by Michel Pawlowitch Lwoff.*)	2865	11th Oct. 1867	William Edward Newton.
Electric telegraph apparatus - - - (*Communicated by Elisha Gray.*)	2879	12th Oct. 1867	William Robert Lake.
Electric telegraph apparatus - - - (*Communicated by C. H. Pond.*)	2909	17th Oct. 1867	William Robert Lake.
Improvements in the construction of telegraphic cables and in the apparatus for the manufacture thereof - - - -	2942	19th Oct. 1867	Alfred Fauvin Jaloureau. Charles Louis Lardy.
Electric telegraph apparatus - - - (*Communicated by George Little.*)	2960	21st Oct. 1867	William Robert Lake.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
TELEGRAPHS, &c.—*continued.*			
Improvements in the manufacture of circular webbing or gasket, applicable as packing for steam-engines, as covering for telegraph cables and other useful purposes, and in the machinery employed therein.	3046	29th Oct. 1867	Joseph Threlfall Carter.
An improved artificial compound chiefly designed for use as a substitute for india-rubber or caoutchouc. (*coating telegraph wires.*) (*Communicated by Austin Goodyear Day.*)	3108	4th Nov. 1867	William Robert Lake.
Improvements in telegraph posts and in apparatus for fixing the same.	3286	20th Nov. 1867	Joseph Oppenheimer.
Telegraphic apparatus - - - - (*Communicated by John Murray Fairchild and Joseph Kidder Bundy.*)	3317	23rd Nov. 1867	Edward Thomas Hughes.
Electric telegraph apparatus - - - (*Communicated by Silvanus Frederic Van Choate.*)	3346	26th Nov. 1867	William Robert Lake.
An improved mode of protecting submarine cables when placed on board ship, from injury by design or from damage by accident, and for facilitating the paying of them out.	3390	29th Nov. 1867	Matthew Fontaine Maury.
Posts or uprights for electric telegraphs - -	3406	30th Nov. 1867	Samuel Sharrock.
Treatment of gutta-percha, indian-rubber, Honduras gum, and the other allied gums, for the production of a preparation or preparations applicable as a varnish, cement, paint, stain, water and air-proof material, solid or elastic material and for other purposes. (*for insulating wires.*) (*Communicated by Daniel Reed.*)	3542	13th Dec. 1867	Edward Reed Sintzenich.
Improvements in electric telegraphic apparatus and in the symbols or characters connected with the transmission of messages by electric telegraphs.	3608	19th Dec. 1867	John Sacheverell Gisborne.
Improvements in the arrangement of electric telegraph and other wires and the apparatus employed or connected therewith, and in laying and supporting wires for telegraphic or other purposes.	3609	19th Dec. 1867	Lewis Matthews Becker.
TESTING THE STRENGTH AND QUALITY OF MATERIALS.			
Improvements in apparatus for separating substances according to their nature or quality, particularly applicable to corn and seeds - - (*useful for testing.*)	1125	16th April 1867	Edmund Brook Nunn. Joseph Phillips Nunn.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
THERMOMETERS, BAROMETERS, PYROMETERS, SALINOMETERS, ELECTROMETERS; TESTING THE STRENGTH OF FLUIDS.			
Improved methods for developing powerful electrical currents and discharges, principally applicable to the production of lights at sea, and in apparatus for determining electrical resistances in connection with such and other currents. (*Partly communicated by Dr. Werner Siemens.*)	**261**	31st Jan. 1867	Charles William Siemens.
Improvements in coating metals and in apparatus employed therein and for like purposes. (*pyrometer.*)	**810**	20th March 1867	Gustav Bischof, junior.
Improvements applicable to feeding bottles, which improvements are also applicable to other useful purposes. (*denoting temperature.*)	**1010**	4th April 1867	William Charles Webber.
Instruments for indicating atmospheric changes and the force of storms.	**1262**	1st May 1867	Henry Augustus Clum.
Galvanometers for receiving signals through submarine and other electric telegraph lines, and for testing them.	**1583**	29th May 1867	David Tunks.
Apparatus for registering and recording the quality of gas. (*Communicated by Christopher Friedleben.*)	**1684**	7th June 1867	James Warburton.
Improvements in the mode of distilling or separating the more volatile portions of petroleum and other mineral oils, and in means or apparatus for ascertaining the igniting and explosive point of such oils.	**2175**	27th July 1867	Edward Alexander Rippingille.
Improvements in apparatus for indicating and registering the pressure of steam in steam generators, and the pressure in hydraulic presses and other vessels or chambers, which improvements are also applicable to indicating and registering pressure and vacuum in steam-engines, the vacuum in condensing apparatus, also to indicating and registering the combined pressure of the steam or other power employed to give motion to an engine, and the speed of such engine or other machinery, also to indicating and registering barometrical variations. (*Communicated by Bernhard August Schäffer and Christian Friedrich Budenberg.*)	**2249**	3rd Aug. 1867	Arnold Budenberg.
An improved thermometer - - - (*Communicated by César Auguste Deverte.*)	**2561**	10th Sept. 1867	Clinton Edgcumbe Brooman.
Improvements in apparatus for testing telegraph conductors, part of the invention being applicable to other purposes.	**2622**	18th Sept. 1867	Frederick Henry Varley.
A new meteorological instrument - -	**3335**	25th Nov. 1867	William Ford Stanley.
An improved alcoholmeter or instrument for ascertaining the alcoholic strength of liquids. (*Communicated by Basile Rakowitsch.*)	**3662**	24th Dec. 1867	William Edward Newton.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
THRASHING, WINNOWING, HULLING, DECORTICATING, DRESSING, CLEANING, DRYING, STORING AND PRESERVING CORN, GRAIN, SEEDS AND RICE.			
Improvements in the mode of and apparatus for manufacturing beton, and in the method of applying beton for certain constructive or structural purposes. (*constructing repositories for grain.*) (*Communicated by François Coignet.*)	77	11th Jan. 1867	Michael Henry.
Machines for separating foreign seeds and other impurities from wheat, other grain or seeds. (*Communicated by David Monroe Childs.*)	142	19th Jan. 1867	Augustus Bryant Childs.
Improvements in rolling and shaping metals, and in the machinery or apparatus employed therein. (*beaters for thrashing machines.*)	196	25th Jan. 1867	William Gray.
Machinery for cleaning wheat and other grain -	405	13th Feb. 1867	Samuel Dwight Mack.
Cinder and other shovels - - - - (*sifting seeds.*)	419	15th Feb. 1867	Richard George.
Improvements in decorticating cereals and in the machinery or apparatus employed therefor.	832	22nd March 1867	William Walker Gibson.
Improved apparatus for manufacturing and assorting semolina, and reducing the same to flour.	917	28th March 1867	Gustav Adolph Buchholz.
Improvements in apparatus for separating substances according to their nature or quality, particularly applicable to corn and seeds - -	1125	16th April 1867	Edmund Brook Nunn. Joseph Phillips Nunn.
Screens or dressing machines for screening or sifting corn, seeds or other substances.	1134	17th April 1867	Robert Boby.
Machinery for drawing and dressing seeds -	1344	7th May 1867	Charles Burrell.
An improved machine for scouring or cleaning grain (*Communicated by Peter T. Elting.*)	1346	7th May 1867	William Robert Lake.
A new or improved machine or apparatus for filling sacks with grain, flour, bran, sugar and other granular or pulverous substances. (*Communicated by Auguste Hourdain.*)	1492	20th May 1867	Charles Denton Abel.
Improvements in preserving grain and in the construction of the granaries to contain the same.	1527	22nd May 1867	Antoine Martin.
Means of and apparatus for landing, trans-shipping or discharging grain and other substances in or from ships, vessels, granaries or warehouses, and for taking or drawing samples of grain from granaries.	1540	23rd May 1867	Louis Stuckenschmidt.
Improvements in thrashing machines and other machines for dressing and separating grain, and in rotary screens to be used therein and for other purposes - - - -	1709	11th June 1867	Richard Hornsby. John Bonnall. Henry Shield.
Apparatus for elevating or moving grain, and for weighing and moving grain.	1717	11th June 1867	Stephen Wells Wood.
Thrashing-machines - - - -	1996	8th July 1867	William Tasker the younger.
Improved machinery for cleaning grain - -	1997	8th July 1867	Alexander Mather.
Drying wheat and other grain, and pulse and seeds, and in the apparatus employed therein -	2023	10th July 1867	James Noah Paxman. Henry Matthews Davey.
Apparatus for the manufacture of artificial fuel, which apparatus may also be employed for other purposes. (*for drying wet corn.*)	2065	13th July 1867	Henry Fletcher.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
THRASHING, &c.—*continued.*			
Apparatus for drying grain, seeds, malt, spent hops, brewers' and distillers' grains, hops, wool, rags and other materials.	2071	13th July 1867	James Lee Norton.
Improved means and apparatus for "malting" or drying barley, part of which means and apparatus is also applicable to other purposes - -	2095	17th July 1867	James Schofield. Joshua Caleb Dawson.
An improved process of decorticating, crushing and treating dry peas.	2127	20th July 1867	Alexandre Sezille.
Machinery for hulling rice and other grains - (*Communicated by Simon Gardner Cheever.*)	2191	29th July 1867	William Robert Lake.
Means or apparatus for sorting, screening and classifying corn, seeds, flour or other substances which it may be desirable to classify. (*Communicated by Edmond Van Schepdael and Baptiste Bourgès.*)	2272	6th Aug. 1867	Hunter Henry Murdoch.
Machinery for hulling wheat and manufacturing semolina.	2508	4th Sept. 1867	Gustav Adolph Buchholz.
Machinery for washing ores, grain, wool and other mineral, vegetable and animal substances.	2568	11th Sept. 1867	Colin Mather.
Improvements in decorticating and cleaning cereals, and in the machinery or apparatus employed therefor.	2640	20th Sept. 1867	William Walker Gibson.
An improved method of and apparatus for drying, cleaning and separating grain.	2659	21st Sept. 1867	John Stonehouse Williamson.
Machines for cleaning rice and other grain or seed -	2702	25th Sept. 1867	Richard Waygood.
An improved apparatus for drying corn, malt or other similar substances.	2804	5th Oct. 1867	John Stonehouse Williamson.
An improved rice unhusking mill - -	2856	11th Oct. 1867	John Charles Wilson.
Apparatus for decorticating rice and other grain - (*Communicated by Monsieur Joseph Perre.*)	2872	12th Oct. 1867	Hector Auguste Dufrené.
Machinery for decorticating or hulling rice and other grain - - - - -	2916	17th Oct. 1867	Thomas Bell. John Richardson.
Improvements in cleaning cotton and cotton seeds, and in the machinery or apparatus employed therein. (*Communicated by Felix Figon.*)	3048	29th Oct. 1867	John Henry Johnson.
Machinery or apparatus for decorticating, hulling or husking pearl barley or other similar grain.	3073	31st Oct. 1867	David Sykes.
Machinery or apparatus for separating and cleaning seeds - - - -	3373	28th Nov. 1867	Thomas Rose. Robert Emerson Gibson.
An improved mode of treating cotton seed to obtain oil therefrom, and in machinery employed therein - - - - (*rubbing and sifting.*)	3388	29th Nov. 1867	Thomas Rose. Robert Emerson Gibson.
An improved mode of and apparatus for decorticating and drying corn and other grain.	3424	2nd Dec. 1867	Jonah Hadley.
Apparatus for cleaning or decorticating cotton seed and other grains or seeds.	3443	3rd Dec. 1867	Nathaniel Grew.
Apparatus for driving straw elevators - -	3477	6th Dec. 1867	Francis Roper.
Improved apparatus for cleaning grain or seeds and reducing the same to meal or flour.	3632	21st Dec. 1867	Jonah Hadley.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
THREADS AND YARNS.			
Improvements in the manufacture of fibrous yarns or threads and in apparatus for the same -	1	1st Jan. 1867	William Wood. James William Wood.
A new and improved machine for dressing or waxing all kinds of thread. (*Communicated by Alfred Thiriez and Edouard Thiriez.*)	224	28th Jan. 1867	Henri Adrien Bonneville.
An improved species of yarn manufactured from fibrous materials, and apparatus for its manufacture - - - - -	262	31st Jan. 1867	Gustavus Adolphus John Schott. John Siegmund Rosenthal.
Machinery for the manufacture of speckled or spotted threads. (*Communicated by Veran Sabran and Gaston Jessé.*)	489	22nd Feb. 1867	Clinton Edgcumbe Brooman.
Preparation of threads and the manufacture of fabrics from the threads so prepared. (*Communicated by Stanislas Vigoureux.*)	509	23rd Feb. 1867	Clinton Edgcumbe Brooman.
An improved combined reel frame and thread cutter.	598	4th March 1867	Richard Edward Keen.
Disaggregation of china grass, hemp, flax, jute, phormium tenax and other vegetable fibres, for the production of threads, fabrics, and pulp for paper. (*see* "SPINNING.") (*Communicated by François Mathurin Caillard.*)	799	19th March 1867	William Clark.
Improvements in the manufacture of textile fabrics and in the means or apparatus employed therein. (*using "French twist" for warp.*)	815	21st March 1867	James Booth.
Cutting india-rubber or other materials into strips or thread.	1193	24th April 1867	Frank Crossley.
Certain improvements in the method of producing a variation of colour during manufacture upon woollen, cotton or other fibrous yarns or threads.	1233	29th April 1867	Joseph Fearns Lawton.
An improved species of yarn - - -	1283	2nd May 1867	Gustavus Adolphus John Schott. John Siegmund Rosenthal.
An improved species of yarns, and apparatus to be applied in the production thereof - -	1405	11th May 1867	Joseph Wilcock Dalby. Pickles Constantine.
Improvements in the manufacture of yarns used for weaving textile fabrics, and in the machinery or apparatus employed therefor.	1645	4th June 1867	Thomas Laidlaw.
Manufacture of certain descriptions of woollen cloths - - - - - (*formation of yarn.*)	1683	7th June 1867	Robert Scott the younger. Joseph Nixon. John Beaumont.
An improvement in twisting or doubling machinery for producing a certain species of yarn - -	1896	28th June 1867	James Holroyd. William Fieldhouse.
An improved mode or improved means of colouring or ornamenting fabrics and other surfaces, and of preparing printing surfaces. (*Communicated by Charles Depoully.*)	2378	19th Aug. 1867	Clinton Edgcumbe Brooman.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
TOBACCO AND SNUFF; CIGARS, CIGAR-HOLDERS, PIPE AND CIGAR LIGHTERS; SMOKING PIPES; TOBACCO POUCHES.			
An improved mould for making cigarettes - -	25	4th Jan. 1867	John Wilkins.
Tobacco pouches - - - -	65	10th Jan. 1867	George Inderwick.
Cases or receptacles for needles, pins, cards, stamps, photographs, cigars and other similar articles.	122	17th Jan. 1867	Richard Newhall.
Improvements in fastenings applicable to boots and shoes, gaiters, gloves, books, portemonnaies and other articles. (*cigar cases.*)	256	30th Jan. 1867	Saxon Macarthy.
An improvement or improvements in pipes for smoking.	263	31st Jan. 1867	Edward John Padbury.
Portemonnaies, portfolios, pocket-books, cigar-cases and other similar articles.	510	25th Feb. 1867	Gustav Lüttringhaus.
Machinery for making cigars - - -	969	1st April 1867	John Prentice.
Means of colouring tobacco pipes and other articles of meerschaum and massa.	1132	17th April 1867	James Smith Brooks.
Pipes for smoking - - - -	1141	18th April 1867	Eduard Wolf.
Cases and boxes for holding needles, pins and other articles. (*cigars.*)	1260	1st May 1867	Reuben Young.
Tobacco pipes - - - -	1456	17th May 1867	Frederic Pelham Warren.
Improvements in the manufacture of tobacco and other pouches, part of such improvements being applicable to the frames of other bags or receptacles.	1554	25th May 1867	Allen Oldroyd.
Construction of tobacco pipes - - -	1686	8th June 1867	Henry Parker.
Improvements in the manufacture of roll tobacco and in apparatus therefor.	1869	27th June 1867	James M^{c}Ewen.
Mouthpieces for cigars and pipes - -	1945	3rd July 1867	William Thompson.
An improved tobacco pipe - - -	1977	6th July 1867	Robert Tiernan.
Improvements applicable to cigars, cheroots, cigarettes, pipes and other smoking tubes. (*Communicated by Moritz Star.*)	2474	30th Aug. 1867	Morris Hammerstein.
Improved apparatus for pressing and shaping cigar bunches.	2514	5th Sept. 1867	George Cope.
Means or apparatus employed for lighting gas and other jets or lamps, candles, cigars and other articles.	2531	7th Sept. 1867	James Joseph Hicks.
Tobacco pipes - - - -	2585	12th Sept. 1867	John William Halfpenny
Pipes for smoking - - - -	2673	23rd Sept. 1867	George Walter Mac George.
Improvements in the manufacture of tobacco and in machinery or apparatus therefor - -	2699	25th Sept. 1867	Andrew Tod. James Heatley, jun^{r}.
Pipes and cigar tubes - - - -	2817	7th Oct. 1867	Raoul Paul Faucheux.
Tobacco pipes - - - - -	2963	22nd Oct. 1867	Charles Ritchie.
Tobacco pouches, purses, cigar cases, and bags of various kinds.	3197	12th Nov. 1867	Raoul Paul Faucheux.
An improved tobacco pipe - . -	3240	15th Nov. 1867	Leopold Beral Bertram.
Machinery for spinning or twisting tobacco -	3332	25th Nov. 1867	Robert Ward.
Matches for lighting cigars and for other purposes -	3336	26th Nov. 1867	Robert Michael Letchford.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
TOBACCO, &c.—*continued.*			
Tobacco pouches - - - - -	3341	26th Nov. 1867	Edwin Townshend.
Treatment of paper and certain woven fabrics for rendering them ornamental and durable as articles of dress, and for decorative and ornamental purposes. (*boxes for cigars.*)	3535	12th Dec. 1867	Edward Reed Sintzenich.
Tobacco pipes - - - - - -	3646	23rd Dec. 1867	Henry Frederick Bengough.
TOYS.			
Improvements in the construction of ships and other navigable vessels and in the mode of rigging, propelling and steering the same, including children's toy ships.	95	14th Jan. 1867	Robert Atkin.
Mechanical movements to be applied to automaton toys and hobby horses. (*Communicated by William Farr Goodwin, and Henry Shotwell Cohu.*)	352	7th Feb. 1867	William Clark.
Construction of locomotive figures and automata - (*rocking horses, &c.*)	1083	11th April 1867	Josiah John Snow.
Construction of automaton figures or toys -	1334	7th May 1867	John Scott Cavell.
Manufacture of small model or toy boats or ships from paper or cardboard.	1367	9th May 1867	Albert Fournier.
Apparatus for applying and regulating motive-power. (*for mechanical toys.*) (*Communicated by Joseph de Susini.*)	1624	31st May 1867	Alexander Melville Clark.
Method of and materials for manufacturing ammunition boxes, pontoons, baggage and other waggons and carriages, and various equipments for military, naval and civil purposes. (*human and animal figures.*)	2630	19th Sept. 1867	Thomas Charles Clarkson.
An improved mode of and means for propelling rocking horses, carriages and other vehicles.	3125	5th Nov. 1867	James William Rowland Hill.
TREADWHEELS.			
Stalls and boxes or seats of treadwheel and crank sheds or houses, and other like sheds or houses.	50	8th Jan. 1867	William Martin.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
TURNING; LATHES FOR TURNING.			
Improved apparatus for regulating, controlling and for varying the speed of shafts and machinery. (*lathes for turning.*)	51	8th Jan. 1867	Robert Robinson.
Certain novel and improved combinations and arrangements of differential wheel gearing, and its application to various purposes - - (*for turning.*)	125	18th Jan. 1867	Charles Frederick Cooke. John Standfield.
Improvements in rolling and shaping metals, and in the machinery or apparatus employed therein. (*lathe racks.*)	196	25th Jan. 1867	William Gray.
Improvements in machine tools for manufacturing parts of locomotive engines, parts of which improvements are also applicable to other similar or analogous purposes. (*lathes.*)	334	6th Feb. 1867	Stephen Alley.
Improvements in the mode of and machinery for manufacturing watches, part of which improvement is applicable to lathes generally where great accuracy is required.	880	26th March 1867	John Wycherley.
Apparatus for raising weights and other appliances (*applied to a lathe.*)	990	3rd April 1867	Jonathan Pickering.
Improved apparatus for cutting or forming metal joints.	2406	22nd Aug. 1867	William Newsome.
Improved apparatus applicable to turning and screw cutting. (*Communicated by William Thomas Cole.*)	2720	26th Sept. 1867	Alfred Vincent Newton.
Improvements in transmitting motive-power and in mechanism or apparatus employed therefor - (*for lathes.*)	3066	31st Oct. 1867	James Tennant Caird. Stewart Robertson.
Improvements in or applicable to that apparatus known as "Giffard's injector," and in the method of and machinery or tools for making the same. (*tools for turning.*)	3169	9th Nov. 1867	James Gresham.
Improvements in the manufacture of cutting tools, and in the construction of tool holders. (*for turning lathes.*)	3339	26th Nov. 1867	John Paterson Smith.
UMBRELLAS, PARASOLS, UMBRELLA FURNITURE; WALKING-STICKS.			
Construction of fire screens, fans, parasols, sun-shades and such like articles - - -	104	15th Jan. 1867	Edward Brown Taylor. Frederick Winter.
An improved covering or protection from sun or weather, adapted for personal use or wear.	132	18th Jan. 1867	Charles Bateman Marsden.
Certain improvements in machinery or apparatus to be employed in the manufacture of umbrellas.	136	19th Jan. 1867	James Robertson.
Construction and manufacture of umbrellas and parasols.	461	20th Feb. 1867	Charles Weigand.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
UMBRELLAS, &c.—*continued.*			
Umbrellas, parasols and sun-shades - - -	602	4th March 1867	Richard Eden Waddington.
Umbrellas and parasols - - - -	845	23rd March 1867	John Henry Soller. Edward Barber.
Construction of umbrellas and parasols - -	926	29th March 1867	John Anderson Simpson.
Ornamental balusters and balustrades, and other ornamental rails. (*for umbrella stands.*)	1364	8th May 1867	Henry Richard Cottam.
Racks or holders for whips, canes and other like articles. (*Communicated by Edward Richmond.*)	1647	4th June 1867	John Henry Johnson.
Umbrellas and parasols - - - -	1766	17th June 1867	James Edward Boyce. Robert Harrington.
Apparatus for carrying umbrellas - - -	1951	3rd July 1867	Elizabeth Martha Brown.
Umbrellas - - - - - (*Communicated by Felix Asselin.*)	2220	1st Aug. 1867	John Henry Johnson.
Manufacture of umbrellas and parasols - -	2400	21st Aug. 1867	Thomas Widdowson.
Umbrellas and parasols - - - -	2447	28th Aug. 1867	James Edward Boyce. Robert Harrington.
Racks or holders for whips, canes and other like articles. (*Communicated by Edward Richmond.*)	3058	30th Oct. 1867	John Henry Johnson.
Umbrellas, parasols and sun-shades - - -	3115	5th Nov. 1867	Henry Smyth.
Manufacture of parasols - - - - -	3167	9th Nov. 1867	Henry Ellis.
Improvements in cases or covers for umbrellas, and in the umbrellas to which such cases or covers are to be applied.	3382	28th Nov. 1867	John Scholefield.
Umbrellas - - - - -	3442	3rd Dec. 1867	William Sangster.
Umbrellas and parasols - - - -	3505	10th Dec. 1867	Charles Conner.
Manufacture of umbrellas - - -	3575	16th Dec. 1867	James Morpeth Shackleton.
UPHOLSTERY (*Mattresses, Beds, Cushions, Curtains, Curtain and Stair Rods, Cornice Poles*); **RUGS, MATS AND MATTING.**			
An improved combined tack driver and carpet stretcher. (*Communicated by Thomas Jebb.*)	188	24th Jan. 1867	George Haseltine.
Manufacture of mattresses - - -	281	1st Feb. 1867	Eliza Walton.
An improved fabric in imitation of the skins of animals, suitable for the manufacture of ladies' mantles, carriage rugs and other articles.	356	8th Feb. 1867	Edwin Firth.
Treating vegetable substances, chiefly applicable to the manufacture of paper pulp and fibres. (*for making mats.*) (*Communicated by Benjamin Chew Tilghman.*)	385	11th Feb. 1867	William Edward Newton.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
UPHOLSTERY, &c.—*continued.*			
Machinery or apparatus for disintegrating wood and other similar fibrous substances. (*for stuffing beds, cushions, &c.*)	477	21st Feb. 1867	William Riddell.
Certain improvements in the manufacture of metallic bedsteads, part of which said improvements are applicable to cornice poles, gas fittings, balustrades and other like articles - -	639	7th March 1867	Robert Luke. William Parkes.
An improved machine for cutting scale-board, and for the manufacture of the scale-board or material cut by said machine into an improved fabric for structures generally. (*for mattresses, &c.*) (*Communicated by John Kinney Mayo.*)	1051	8th April 1867	William Clark.
Mattresses, pillows, cushions and analogous articles (*Communicated by Thérèse Amine Petiteau, born Versepuy.*)	1258	1st May 1867	William Edward Gedge.
Spring mattresses or beds and bedsteads - -	1293	3rd May 1867	Ernest Krieghoff.
Billiard tables - - - - - (*cushions for billiard tables.*) (*Communicated by Hugh W. Collender.*)	1440	15th May 1867	Alfred Vincent Newton.
Spring bed bottoms - - - -	2145	23rd July 1867	Sterling Bonsall.
An improved metallic spring mattress - -	2363	17th Aug. 1867	Louis Avoyne-Bainée. Marie Joseph Sibillat.
Elastic mattresses - - - -	2399	21st Aug. 1867	John Mangnall.
An improved carpet stretcher and tack driver - (*Communicated by William Brown.*)	2475	31st Aug. 1867	Alexander Horace Brandon.
Spring mattresses - - - - -	2496	3rd Sept. 1867	Elisha Thomas Archer.
Manufacture of appliqué embroidery on tulle, muslin or similar fabrics in various colours and designs. (*for curtains, hangings, &c.*) (*Communicated by Jean François Planus, jeune.*)	2510	5th Sept. 1867	Arthur Charles Henderson.
Spring mattresses, sofas, couches and chairs -	2619	17th Sept. 1867	Daniel Gardner.
Looms for weaving ornamental fabrics such as leno and muslin curtains - - -	2727	27th Sept. 1867	Forrest Frew. James Speirs.
Construction of bedsteads and mattresses - -	2766	1st Oct. 1867	Thomas Edward Clarke.
India-rubber mats - - - - -	2783	3rd Oct. 1867	George Pomeroy Dodge.
Improvements in mattresses, sofas, couches, ottomans, easy chairs, railway carriage seats and other such like or similar articles - -	2834	8th Oct. 1867	Robert Reid. Edward Horne Craigie.
Manufacture of pillows, mattresses, feather beds, seats, cushions and other similar articles.	2956	21st Oct. 1867	Jean Clapier.
A novel kind of nail or tack for upholstery and cabinet work. (*Communicated by Louis Gabriel Ragueneau.*)	2988	24th Oct. 1867	William Edward Gedge.
Improvements in carpet linings and in machinery for manufacturing the same. (*Communicated by George Washington Chipman.*)	3005	25th Oct. 1867	William Robert Lake.
An improved cap for upholstery or furniture springs. (*Communicated by Ambrose Tower.*)	3068	31st Oct. 1867	William Robert Lake.
Mats and matting - - - -	3092	2nd Nov. 1867	William Cooke. Walter Francis.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
UPHOLSTERY, &c.—*continued.*			
Mattresses, cushions, sofas, seats and other similar articles. (*Communicated by Friedrich August Kandler.*)	3104	4th Nov. 1867	Nathan Birkenruth.
An improved curtain or screen for separating the stage from the audience part in theatres and music halls, in order to prevent the spreading of fire, also applicable to other buildings where it is desired to prevent the spreading of fire from one part of the building to another part.	3523	12th Dec. 1867	George Adam Young.
Treatment of paper and certain woven fabrics for rendering them ornamental and durable as articles of dress, and for decorative and ornamental purposes. (*curtains, valances, &c.*)	3535	12th Dec. 1867	Edward Reed Sintzenich.
Improvements applicable to metallic bedsteads and mattresses.	3594	18th Dec. 1867	Robert Doyne Dwyer.
Certain improvements in carding-engines to be employed in the process of manufacturing felt carpeting - - - - -	3722	31st Dec. 1867	William Mitchell. Thomas Mitchell.
VALVES, TAPS, STOP-COCKS, PLUGS; REGULATING THE FLOW AND PRESSURE OF FLUIDS.			
Harmoniums and organs - - - - -	41	7th Jan. 1867	Charles Kelly. Constant Laurent.
An improved pneumatic apparatus for the treatment of diseases in an attenuated atmosphere. (*Communicated by George Hadfield.*)	55	8th Jan. 1867	William Edward Newton.
Improvements in the means of and apparatus for lighting railway carriages, parts of which improvements are also applicable for other purposes.	58	9th Jan. 1867	William Thomas Sugg.
Steam-engines - - - - -	61	9th Jan. 1867	James Petrie.
An improved apparatus for lubricating carriage axles. (*Communicated by John Burt Powell.*)	96	14th Jan. 1867	George Haseltine.
Improvements in the construction of wash basins, and apparatus for supplying hot and cold water to the same, which improvements are also applicable to apparatus for supplying water to baths and other similar receptacles.	147	21st Jan. 1867	Robert Harlow.
Safety valves - - - - - -	192	25th Jan. 1867	John Wolstenholme. Edward Holt.
Improvements in lighting railway carriages with gas and in the apparatus employed therein.	230	29th Jan. 1867	François Constant Cambrelin.
An improved cock or tap - - - -	291	2nd Feb. 1867	Aaron Bradshaw.
Improved apparatus or mechanism for supplying steam-boilers with water, and for preventing their explosion.	295	2nd Feb. 1867	Henry Banks Wright.
Slide valves - - - - -	343	7th Feb. 1867	William George Beattie.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
VALVES, &c.—*continued.*			
An improved apparatus for drawing liquids from casks and other vessels - - - (*see* "PIPES.")	409	13th Feb. 1867	Henry Albert Davis. Samuel John Salkeld.
An improved apparatus for drawing off liquids and supplying them to bottles and other receptacles.	424	15th Feb. 1867	Pierre Duchamp.
Gas engines - - - - -	499	23rd Feb. 1867	Arthur Kinder. William Barnes Kinsey.
Certain improvements in fluid safety guages for steam-boilers and other pressure and vacuum vessels.	511	25th Feb. 1867	John Marshall.
Machinery for mining, cutting or working coal and other minerals, and for hammering metals and crushing minerals.	535	27th Feb. 1867	Andrew Howat.
An improved packing for piston rods, pump rods and valve spindles.	543	27th Feb. 1867	John McLintock.
Steam and gas engines - - - - (*Communicated by Charles E. Emery.*)	571	28th Feb. 1867	Alfred Vincent Newton.
Improvements in self-acting steam and fluid safety gauges, the said improvements being applicable to cocks or taps and valves.	591	2nd March 1867	John Ambrose Coffey.
Engines worked by heated air and by other suitable heated gas or gases. (*regulating power and speed.*)	633	7th March 1867	Alphonse Louis Normandy.
Safety valves for steam-boilers or generators - (*Communicated by George William Richardson.*)	643	7th March 1867	Alfred Vincent Newton.
Ball or supply valves - - - - -	690	11th March 1867	Joseph Pearson.
Valves for steam-engines and other purposes -	703	12th March 1867	Bernard Peard Walker.
Taps and valves - - - - - (*Communicated by Manuel Grumbach.*)	709	12th March 1867	Charles Maschwitz the younger.
Slide valves of steam-engines - - -	718	13th March 1867	Justin Thèvenet.
Improvements in boilers or steam generators and in valves or plugs connected therewith.	756	16th March 1867	Thomas Cowburn.
Slide valve gear for steam-engines - -	759	16th March 1867	John Milner.
Improvements in steam fire-engines and boilers, such improvements being applicable to other purposes.	772	16th March 1867	James Shand.
Improvements in setting boilers and in safety valves for the same.	779	18th March 1867	William Henry Parsons.
Certain improvements in safety valves for steam-boilers.	785	19th March 1867	Charles Frederick Cooke.
Construction and arrangement of the connections and casings of lock-up or protected safety valves for steam generating apparatus.	794	19th March 1867	Adam Scott Cameron.
Stop valves or taps for steam and water - -	836	22nd March 1867	Joseph Whitley.
Valve gear of steam-engines - - - (*Communicated by William Wright.*)	882	26th March 1867	William Edward Newton.
A counting and controlling cock for liquids -	928	29th March 1867	Eugéne Canton.
Improvements in means or apparatus employed in the cure of smokey chimneys, and in ventilating buildings and other places - - - (*mounting mica valves.*)	941	30th March 1867	Richard Canham. William Kreut.
Cocks or valves for discharging water, oil and other fluids or gases.	1029	5th April 1867	Henry Wilson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
VALVES, &c.—*continued.*			
Taps and valves used for regulating or restraining the flow of water or other liquids, steam or gases.	1037	6th April 1867	Graham Stuart.
Improvements in the manufacture of spoons, forks and other similar articles, and in apparatus or machinery to be employed therein, parts of which said apparatus or machinery are applicable to other manufactures. (*valves.*)	1055	9th April 1867	Daniel Joseph Fleetwood.
Valve seats - - - - -	1066	10th April 1867	James Robert Napier. William John Macquorn Rankine.
Construction of valves and valve cocks - -	1102	13th April 1867	John Shore.
Improvements in distributing and measuring gas, steam, water and other fluids, and in the apparatus or means employed therein.	1158	20th April 1867	Richard Hastings Frith.
Apparatus for regulating the supply of liquids or fluids - - - - -	1199	25th April 1867	Charles Edgar Wetton. William Galsworthy.
Steam-engines - - - - - (*Communicated by Frederick W. Gordon.*)	1203	25th April 1867	John Millward.
Apparatus for reducing and regulating the quantity and pressure of steam, fluids and gases.	1217	26th April 1867	George Pollard.
Indicating measure taps for drawing off liquids -	1248	30th April 1867	Robert Wood Ridley. John Withers.
Safety valves and arrangements for preventing damage to or the explosion of steam-boilers. (*Communicated by Murdoch Macpherson.*)	1284	2nd May 1867	Thomas Wood.
Apparatus for storing and drawing off beer, wine and other materials.	1289	2nd May 1867	Charles Ritchie.
Slide valves of steam-engines - - -	1306	4th May 1867	Justin Thèvenet.
Valves for regulating the flow of liquids, gases and other elastic fluids.	1335	7th May 1867	Eugène Bourdon.
An improved system of tenders for locomotives - (*self-acting spring valves.*)	1347	7th May 1867	George Krauss.
Hydraulic valve gear for steam and analogous engines.	1348	7th May 1867	Norman Willis Wheeler.
Construction and packing of slide valves and adjacent parts for steam and other engines.	1350	7th May 1867	Norman Willis Wheeler.
Apparatus for introducing and controlling the introduction of fluids to surface condensers of steam-engines.	1351	7th May 1867	Norman Willis Wheeler.
Certain improvements in the means of casting or producing parts of steam, gas and water fittings, as also parts of lamps and other articles. (*plugs.*)	1355	8th May 1867	Charles Layton.
An improved "bib," "stop," or water-closet tap or cock.	1371	9th May 1867	John Bowden.
Improvements in casks and in apparatus for storing and drawing off liquids and semi-fluid matters.	1380	9th May 1867	Charles Ritchie.
Valves for steam and other fluids - -	1384	10th May 1867	William Bracewell. William Pickup. Benjamin Lund.
Improvements in gauges for steam-boilers, and in the construction and application of taps, cocks or valves for or to such gauges.	1401	11th May 1867	John Steven.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
VALVES, &c.—*continued.*			
An improved mode of constructing metal cocks, faucets and other similar articles. (*Communicated by William Westlake.*)	1407	11th May 1867	William Robert Lake.
An improved method of and apparatus for drawing off and refining liquors or liquids of any kind.	1421	13th May 1867	William Sodo.
Improvements in the means of raising liquids and in apparatus for the same. (*Communicated by Pierre Léon Margot, jun^{r}.*)	1427	14th May 1867	Alexander Melville Clark.
An improved apparatus for more effectually regulating the supply of water or other fluids to cisterns or other receptacles, and for economizing the trouble and expense connected therewith - - - - - -	1474	18th May 1867	James Theodore Bland. Edwin John Bland. Thomas Brevetor.
Slide-valves - - - - -	1479	18th May 1867	Charles William Dixon.
Improvements in apparatus for measuring fluids, which improvements are also applicable for obtaining motive-power and for pumping - -	1561	27th May 1867	Herbert Frost, senior. Herbert Frost, junior.
Mining, tunnelling and stone dressing machines, and valve motion therefor. (*Communicated by Richard Channing More Lovell.*)	1566	27th May 1867	William Snell.
Improvements in the construction of steam-boilers and in apparatus connected therewith.	1637	3rd June 1867	Charles Louis Joseph Carville, senior.
Steam-engines - - - - -	1661	6th June 1867	Edward Bland.
Improvements in guns, projectiles and cartridges, and in the construction of the same. (*making a gas check or valve.*)	1757	15th June 1867	George Clark.
Construction of motive-power engines and pumps	1822	21st June 1867	Emory M^{c}Clintock.
Improvements in double-action pumps and in the methods of operating pumps, part of which improvements are applicable to other reciprocating machines.	1827	22nd June 1867	Stephen Holman.
Apparatus for the manufacture of iced beverages - (*soda water and syrup taps.*) (*Communicated by Gustave D. Dows, Adolphe Clarck and Abraham Van Winkle.*)	1875	27th June 1867	William Edward Newton.
Self-acting escape or relief valves applied to the cylinders of steam-engines - - -	1940	3rd July 1867	Walter Samuel Scott. William Henry Steel.
Improvements in steam and other hammers whereby to effect economy in the use of the steam or other fluid actuating said hammers.	1944	3rd July 1867	David Davy.
Improvements in or applicable to steam and other motive engines.	1974	6th July 1867	Walter Charles Church.
A new or improved plug valve - - -	1992	8th July 1867	Ivie Mackie McGeorge. Alfred Paul.
Slide valves suitable for steam-engines - -	2001	8th July 1867	Nathaniel Clayton. Joseph Shuttleworth.
Apparatus for producing or increasing the light or heat from carbonized atmospheric air, gas or gaseous mixtures, by the use of hydrocarbons, oils, spirits or other inflammable liquids or any mixture thereof.	2045	12th July 1867	Frederick Wilkins.
Safety or relief valves - - - -	2053	12th July 1867	John Pasfield.
An hydraulic self-acting vent peg - - (*Communicated by Henry Clarke.*)	2067	13th July 1867	Edward Thomas Hughes.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
VALVES, &c.—*continued.*			
Steam-engines	2101	17th July 1867	John Russell Swann.
Improvements in the lateral action or induction of fluids, and in the apparatus or mechanism employed therefor.	2106	18th July 1867	Alexander Morton.
Taps or valves	2133	22nd July 1867	Henry Lea.
Steam-engines	2169	26th July 1867	Jonathan Edge.
An improved water and gas meter (*Communicated by Joshua Mason.*)	2179	27th July 1867	William Edward Newton.
Combined gas and air engines (*Communicated by Eugen Langen and Auguste Nicol Otto.*)	2245	3rd Aug. 1867	Charles Denton Abel.
Certain improvements in steam-engines	2284	8th Aug. 1867	George Holcroft. William Nathan Dack.
Improvements in or applicable to slide valves for admitting the flow or passage of steam, water or other fluids and gases when pressed	2300	10th Aug. 1867	John Davenport. John Kitson.
Slide valves	2402	22nd Aug. 1867	Thomas Sault.
Apparatus for raising water or other liquids by steam power. (*Communicated by William Lewis Horne.*)	2408	22nd Aug. 1867	Alexander Melville Clark.
Method of warming carriages employed in the conveyance of passengers on railways	2415	23rd Aug. 1867	Ferdinand Ziffer. Walter Goodbrand.
Certain improvements in metallic packing to be employed for the "glands" and "stuffing boxes" of valves or cylinders used for steam or liquid.	2419	23rd Aug. 1867	William Shorrock Ashton.
Construction and fitting up of safety valves for steam-boilers or generators. (*Communicated by George William Richardson.*)	2520	5th Sept. 1867	Alfred Vincent Newton.
Construction of stuffing-boxes, slide valves and steam jacketings.	2556	10th Sept. 1867	John Jordan.
Improvements in valve closet apparatus, part of which is applicable for regulating the flow of water in other cases. (*Communicated by François Taçon.*)	2621	17th Sept. 1867	Alexander Melville Clark.
Improvements in and applicable to slide valves	2625	18th Sept. 1867	Thomas Adams. George John Parson.
Apparatus to be applied to cisterns for preventing waste of water	2665	21st Sept. 1867	Angus Mackenzie. Samuel Robinson.
Improvements in apparatus for regulating automatically the supply of gas, air and water, or any one or more of them, to steam-boilers heated by gas or otherwise, and for utilizing the heat of the gases produced or heated by combustion.	2674	23rd Sept. 1867	Charles Ritchie.
Improvements in the construction of air cylinders of blast engines, and in the valve arrangements for the same. (*Communicated by Franz Stichler.*)	2682	23rd Sept. 1867	Louis Rudolph Bodmer.
Taps for beer casks and other vessels	2703	25th Sept. 1867	Alfred Rooker.
Steam-engines	2713	26th Sept. 1867	John Wood. Benjamin Wood. Richard Wood.
Slide valves of steam-engines	2812	7th Oct. 1867	Jacob Goodfellow.
An improvement in ball and other cocks	2823	8th Oct. 1867	Richard Garratt.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
VALVES, &c.—*continued.*			
Means or machinery for working or actuating the slide valves of steam pumps and blowing engines - - - - -	2854	11th Oct. 1867	John Withinshaw. John Edward Baker.
An improved feed-water apparatus for maintaining a proper water level in steam-boilers and other vessels.	2861	11th Oct. 1867	Arthur Helwig.
Apparatus for regulating the feed of steam-boilers	2868	12th Oct. 1867	James Buckingham. John Sanders Blockey.
Improvements in the conduction or transmission of fluids, and in the means, apparatus or mechanism employed therefor - - -	2870	12th Oct. 1867	Robert Flamwell Baré. John Thomson.
Improvements in stoppers for bottles, which improvements are also applicable to cocks for casks and other like receptacles - - -	2922	18th Oct. 1867	Francisco Prudencio. Frank Cooper. Joseph Francis Cotterell.
Steam governors and valves - - - (*Communicated by Francis Johnston Nutz, Philip Estes De Forrest Fairchild and Edward Payson Willson.*)	2980	23rd Oct. 1867	Alexander Melville Clark.
Cocks or valves for discharging water, oil and other fluids or gases.	3004	25th Oct. 1867	Henry Wilson.
Apparatus for preventing effluvia entering tanks or cisterns from the waste pipe - - -	3047	29th Oct. 1867	William Bishop. Benjamin Burningham.
Improvements in actuating the valves of water and other meters, and of engines for obtaining motive-power.	3050	29th Oct. 1867	Loftus Perkins.
Valves for hydraulic presses and for other purposes.	3055	30th Oct. 1867	Joseph Beverley Fenby.
Apparatus for producing motive-power - - (*Communicated by William C. Stiles.*)	3090	2nd Nov. 1867	Alexander Melville Clark.
Cocks or taps - - - - -	3225	14th March 1867	Richard Harrison.
Improvements in steam and other motive-power engines and in valves for engines - -	3299	21st Nov. 1867	William Robert Green. John George Freeman.
A new and improved process and machinery for the manufacture of soda water and other aërated liquids.	3307	22nd Nov. 1867	Valentine Burchell.
Improvements in the manufacture of gas, and in the treatment and application of such and other gases for cooking, warming, lighting, generating of steam and other purposes, combined with their use as a motive-power previous to being burned or consumed, and improvements in the apparatus for these purposes.	3318	23rd Nov. 1867	Peter Salmon.
Method of and apparatus for facilitating the flow of liquids from barrels or other closed vessels.	3367	28th Nov. 1867	Robert Hunter Bentham.
Certain improvements in steam-engines - - (*slide valves.*)	3379	28th Nov. 1867	Edward Wood.
Valves for steam-engines - - -	3421	2nd Dec. 1867	William Black. Thomas Hawthorn.
Improvements in steam winches, which are also applicable to other similar purposes. (*Communicated by Joseph Corradi.*)	3425	2nd Dec. 1867	George Breen.
Safety apparatus for steam-boilers or steam generators - - - - - -	3472	6th Dec. 1867	John William Kenyon. Robert Arthur Armitstead.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
VALVES, &c.—*continued.*			
Improvements in elastic packings for the pistons of steam-engines and for other purposes, and in the machinery employed in the manufacture of such packings. (*for valves.*)	3495	9th Dec. 1867	Edward Keirby.
Certain improvements in steam-engines - -	3512	11th Dec. 1867	George Holcroft. William Nathan Dack.
An improved equilibrium slide-valve for steam-engines - - - - - -	3528	12th Dec. 1867	Richard Roberts. Philip Williams.
Improvements in guns, projectiles and cartridges, and in the construction of the same.	3562	14th Dec. 1867	George Clark.
Improved apparatus for controlling the draught of water from constant supply pipes.	3563	14th Dec. 1867	Edward Hammond Bentall.
Construction of valves and valve cocks - -	3578	16th Dec. 1867	William Jackson. Joseph Dyer.
Faucets and apparatus for measuring liquids - (*Communicated by Arthur Gates Wilson.*)	3624	20th Dec. 1867	Levi Lincoln Tower.
An improved ventilator - - - - -	3626	21st Dec. 1867	John Thomas Kershaw.
Apparatus for boiling size - - -	3627	21st Dec. 1867	James Kenyon.
Improvements in tanning and in the apparatus to be employed therein.	3649	23rd Dec. 1867	Jonas Dawkins.
Self-closing taps - - - - -	3687	28th Dec. 1867	William Fryer.
VENTILATION; SUPPLYING AND PURIFYING AIR FOR BUILDINGS, MINES, SHIPS, CARRIAGES, &c.			
An improved mode of and machinery or apparatus for obtaining power from the motion of a ship or vessel at sea for pumping, ventilating and other purposes. (*Communicated by Wilhelmus Johannes Van de Ven.*)	11	2nd Jan. 1867	Charles Denton Abel.
An improved apparatus for working "punkahs," the same being also applicable for watering tatties.	34	5th Jan. 1867	George Logan.
Means of saving life in pits and mines - -	40	7th Jan. 1867	Charles James Pownall.
Waterproof and other articles of wearing-apparel -	66	10th Jan. 1867	Alfred Foucaut.
Means and apparatus for ventilating mines -	117	17th Jan. 1867	Robert James.
Certain improvements in the ventilation of mines	235	29th Jan. 1867	John Hopkinson.
Horticultural buildings or glazed structures for horticultural and other purposes.	294	2nd Feb. 1867	William Richardson.
Certain improvements in apparatus for preventing "down draught" in chimnies, which may also be applied for the purpose of ventilation.	444	19th Feb. 1867	Charles Wenner.
Means of ventilating pits and mines - -	552	28th Feb. 1867	Charles James Pownall.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
VENTILATION, &c.—*continued.*			
Destroying explosive gases in coal and other mines, in order to render them safe for the miners to enter - - - - -	565	28th Feb. 1867	James Harbert. Frederick Goodman.
Improvements applicable to the ventilation of theatres, churches and other large buildings, and in purifying and cooling the air supplied thereto. (*Communicated by Henri Cabanes.*)	722	13th March 1867	William Edward Newton.
An improved mode of and apparatus for warming and ventilating buildings.	791	19th March 1867	Matthew Semple.
Steam heating and ventilating apparatus - - (*Communicated by Adolph Sternfeld.*)	827	21st March 1867	George Haseltine.
Construction of floors and rooms for buildings -	885	26th March 1867	Richard Moreland.
Improvements in means or apparatus employed in the cure of smokey chimneys, and in ventilating buildings and other places - - -	941	30th March 1867	Richard Canham. William Kreut.
An improved process for manufacturing ice and for other refrigerating purposes. (*for ventilation.*) (*Communicated by Thaddeus Sobeski Carlincourt Lowe.*)	952	30th March 1867	William Edward Newton.
Machinery or apparatus for obtaining and applying motive-power. (*as a ventilator.*)	984	2nd April 1867	Jean Albert Moll.
Fittings for stables, harness rooms and cow houses. (*ventilators.*)	993	3rd April 1867	James Musgrave.
A new improved apparatus applicable to the ventilation of mines, buildings and other places.	1194	25th April 1867	Theodore Lemielle.
Improvements in skylights and ventilators for steam vessels, part of which is applicable to other structures.	1349	7th May 1867	Norman Willis Wheeler.
An improved self-acting and ventilating nose or feed bag for horses - - - - (*Partly communicated by Nathaniel Knight.*)	1395	11th May 1867	John Adams Knight. Charles Bastand.
An improved fire-escape, parts of which are applicable to the ventilation of buildings and the extinguishing of fire therein - - -	1418	13th May 1867	Martin Dadd Rogers. Joseph Wilson.
Improvements in apparatus for securing cords and straps such as are used for raising and lowering window blinds, ventilators, carriage windows and for other similar purposes - -	1696	8th June 1867	Robert Edward Pepys. James Warburton.
Improvements in the construction of life-boats, and in detaching tackle for boats. (*and ventilating.*) (*Communicated by Milton Vorse Nobles, David Decker and William James Dounce.*)	2052	12th July 1867	Alexander Melville Clark.
Manufacture of corsets - - - - (*and ventilating.*) (*Communicated by Joseph Beal, Granville Webster, Edward Sawyer and John Hunt.*)	2056	12th July 1867	George Tomlinson Bousfield.
Means or mode of ventilating the interior of railway and other carriages, cabins and holds of ships and other enclosed spaces. (*Communicated by Signor Vecchj.*)	2078	15th July 1867	Alfred Buckingham Ibbotson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
VENTILATION, &c.—*continued.*			
Pipes for ventilating, heating and vaporizing hot-houses, malthouses and other buildings and residences.	2125	20th July 1867	William Taylor.
Improved automatic apparatus for the ventilation of railway carriages, omnibuses and other vehicles, and the cabins of steamboats.	2126	20th July 1867	William Gaudly Creamer.
Ventilators - - - - -	2130	20th July 1867	James Hooper.
Means of ventilating and regulating the draught of close fire ranges or kitcheners.	2461	29th Aug. 1867	Joseph Douglas.
Apparatus for submarine exploration - - (*purifying the air.*) (*Communicated by George Wrightson.*)	2466	29th Aug. 1867	Alexander Melville Clark.
Improved apparatus for excluding dust from railway carriages.	2526	6th Sept. 1867	William Gaudly Creamer.
Apparatus for ventilating rooms and buildings -	2641	20th Sept. 1867	William Potts.
Ventilators for hats and other coverings for the head.	2655	21st Sept. 1867	Percy Crause.
Apparatus for ventilating underground railways and other like structures.	2684	23rd Sept. 1867	Sanders Bevan.
Apparatus or arrangements for warming and ventilating buildings.	2701	25th Sept. 1867	William Woodcock.
Apparatus for warming and ventilating apartments or buildings.	2853	11th Oct. 1867	Richard George.
Fans for the ventilation of mines, or for propelling air into furnaces, or for other purposes.	2964	22nd Oct. 1867	Theodore Lemielle.
Means for ventilating buildings and other places -	2968	22nd Oct. 1867	James White.
Improved modes of and means for curing, drying, preserving and packing meat, fruit, vegetables and other perishable substances. (*ventilating packing houses.*) (*Communicated by Daniel E. Somes.*)	3006	25th Oct. 1867	William Robert Lake.
Ventilation of buildings, ships and carriages - (*Communicated by Herrn Scharrath.*)	3060	30th Oct. 1867	Alfred Vincent Newton.
Warming, ventilating and heating apparatus -	3155	8th Nov. 1867	Joseph Wontner Smith. Tony Petitjean.
Improvements in omnibuses and similar vehicles, and in apparatus in connection therewith, part of which improvements are also applicable to railway and other carriages. (*ventilator.*)	3178	11th Nov. 1867	William Thompson.
Certain improvements in apparatus for ventilating buildings and other similar purposes.	3361	27th Nov. 1867	James Sutcliffe Smith.
Improvements in the means of ventilating rooms and buildings, and in apparatus for the same.	3397	29th Nov. 1867	John Joseph Parkes.
Improvements in steam winches, which are also applicable to other similar purposes. (*applicable to ventilators.*) (*Communicated by Joseph Corradi.*)	3425	2nd Dec. 1867	George Breen.
An improved ventilator - - -	3626	21st Dec. 1867	John Thomas Kershaw.
Improvements in warming, ventilating and heating apartments or buildings, and in the arrangement of apparatus connected therewith.	3682	27th Dec. 1867	John William Lewis.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
VICES, WRENCHES, DRILL-BRACES, SCREW-STOCKS, SCREW-KEYS OR SPANNERS, CRAMPS, NIPPERS, BENCH-DOGS OR HOOKS.			
New and useful improvements in bench vices -	341	6th Feb. 1867	John Sherman Hoar.
An improved cramping and lifting apparatus - (*Communicated by Henry Hitchings Baragwanath.*)	742	14th March 1867	John Phillips Baragwanath.
Ratchet levers for actuating drills, screw drivers, watch keys and other like instruments.	1360	8th May 1867	Thomas Aldridge Weston.
Moveable spanners or screw wrenches - -	1799	20th June 1867	Thomas Wilson.
An improved arrangement or construction of adjustable wrenches.	1802	20th June 1867	Charles Stuart.
Nippers - - - - - (*Communicated by William Scott Millar, Thomas Greenman Hall and Albert Michelsberg.*)	1826	22nd June 1867	Alexander Melville Clark.
An improvement in adjustable wrenches - - (*Communicated by John Parker Lindsay.*)	1894	28th June 1867	John Garrett Tongue.
An improved "bench dog" or "bench hook" -	1918	1st July 1867	Frederic Towns Pollard.
Machinery for tenoning wood - - - (*and dog cramp.*)	2047	12th July 1867	William Blackett Haigh.
Moveable spanners or screw wrenches - -	2108	18th July 1867	John Palmer. John Palmer the younger. Thomas Palmer.
WASHING, CLEANSING AND WRINGING FABRICS, YARNS AND MATERIALS.			
Forming shafts, rollers, drums and wheels with india-rubber surfaces. (*rollers for washing machines.*)	289	2nd Feb. 1867	John Poole.
Construction of machines for washing and churning	360	8th Feb. 1867	Thomas Sibley.
Rollers for wringing and mangling - -	421	15th Feb. 1867	William John Knowles. John Edward Wilding.
Preparation of threads and the manufacture of fabrics from the threads so prepared. (*preparing for washing.*) (*Communicated by Stanislas Vigoureux.*)	509	23rd Feb. 1867	Clinton Edgcumbe Brooman.
Washing-machines - - - -	697	11th March 1867	Matthew Chamberlaine.
Machinery for washing and cleansing wool and other fibrous materials.	713	12th March 1867	James Lee Norton.
Preparation of soap adapted more especially for the scouring of wool and woollen yarns.	752	15th March 1867	George Smith.
Process of and apparatus for cleaning waste and other substances, and preventing the adhesion of sediment in steam-boilers and pipes.	774	18th March 1867	John Smith.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee
WASHING, &c.—*continued.*			
Ironing, pressing, finishing and damping machinery (*for laundresses.*)	793	19th March 1867	James Moore Clements.
Machinery for seeding, breaking, drying, washing, bleaching, softening, combing, brushing and hackling flax, hemp, jute, China grass, New Zealand flax, Esparto and other fibres, for spinning and paper stuff.	841	22nd March 1867	John Spencer.
Treatment of wool and other animal textile materials, whether in a raw or manufactured state. (*Communicated by Jean Baptiste Frezon the elder.*)	861	25th March 1867	John Henry Johnson.
Engines and machines for washing, beating, grinding or reducing rags and other fibrous substances into paper pulp, and into fibres for yarns or cloth.	914	28th March 1867	William Wood.
Apparatus for raising weights and other appliances (*applied to a wringing machine.*)	990	3rd April 1867	Jonathan Pickering.
Machines for washing wool and other fibrous materials.	1013	4th April 1867	John Petrie, jun^{r}.
Machinery for washing wool and other fibrous materials - - - - -	1155	20th April 1867	John Petrie the younger. Reuben Ackroyd.
Manufacture of paper and of the chemical matters employed therein - - - - (*washing the boiled fibres.*) (*Partly communicated by Ernest Pinchon.*)	1171	22nd April 1867	Charles Townsend Hook. Eustace Hook.
An improved mode of and apparatus for sprinkling or diffusing liquids for refining sugar and other purposes. (*Communicated by Helem Merrill.*)	1179	23rd April 1867	William Robert Lake.
Improvements in the treatment of fibrous materials and in apparatus to be used in such treatment.	1207	26th April 1867	John Watson Burton.
An improved washing powder - - - (*Communicated by Louis Lacalm and Barthelemy Adolphe Guyot.*)	1412	13th May 1867	Henri Adrien Bonneville.
Improvements in machinery for washing wool, the said improvements being also applicable to other purposes. (*Communicated by Jonathan Holden.*)	1477	18th May 1867	Alexander Horace Brandon.
Machinery for washing and drying wool and other materials.	1486	18th May 1867	James Lee Norton.
Boilers for boiling or steaming roots, and for heating water for other purposes - - (*for washing.*)	1497	20th May 1867	Valentine Barford. John Skerman.
Machines for washing and bleaching clothes and all kinds of textile materials. (*Communicated by Jules Decoudun.*)	1582	28th May 1867	Alexander Melville Clark.
An improved method of and apparatus for extracting fatty matters from and for scouring wool and other fibrous substances and textile fabrics, by the use of sulphuret of carbon, and for regaining the sulphuret used in such operation.	1887	28th June 1867	Charles Otto Heyl.
An improved method of and apparatus for extracting oil or fatty matter from cotton or woollen waste, shoddy, mungo, rags and analogous substances, by means of sulphuret of carbon.	1897	29th June 1867	Charles Otto Heyl.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
WASHING, &c.—*continued.*			
Improved means of and apparatus for washing and drying moist substances, or drying and burning granular substances, or evaporating liquid substances, and for economizing the waste heat produced in such processes.	1930	2nd July 1867	George Gordon.
Improvements applicable to washing, wringing and mangling machines - - - -	1968	5th July 1867	Edward Owen Greening. Joseph Atkinson.
Machinery or apparatus for bowking, bleaching and cleansing textile fabrics and fibrous materials.	2243	3rd Aug. 1867	John Smith.
Solvent or detergent processes - -	2410	22nd Aug. 1867	James Garth Marshall.
Machinery for washing ores, grain, wool and other mineral, vegetable and animal substances.	2568	11th Sept. 1867	Colin Mather.
Improvements in washing rollers and blankets used by printers, and in the machinery or apparatus employed therefor.	2667	21st Sept. 1867	Thomas Muir.
Construction of fulling-stocks or fulling-machines - (*washing-machines.*)	2903	16th Oct. 1867	Ernest Gessner.
Washing-machines - - -	3230	14th Nov. 1867	Jean Pierre Leopold Heckmans. Frederick James Nunney.
Cleansing wool and other similar animal fibres -	3249	16th Nov. 1867	Read Holliday.
Apparatus for boiling, washing or cleansing, and dyeing clothes and fabrics, and for other like purposes. (*Communicated by James Brown.*)	3290	20th Nov. 1867	William Brewster.
An improved apparatus for boiling and washing textile fabrics and fibres. (*Communicated by Daniel Bliss Dudley.*)	3385	29th Nov. 1867	William Robert Lake.
An improved method of and apparatus for washing or cleansing clothes. (*Communicated by Moses Wilmington Staples.*)	3395	29th Nov. 1867	Alfred Vincent Newton.
Improvements in washing-machines known as "Dollys," which improvements render such machines also applicable for crushing and fulling fabrics - - - - - -	3558	14th Dec. 1867	William Bates. Frederick Bates.
Improvements in the extraction of ammonia from fermented and other liquids, and in the regeneration of the agents used in such extraction. (*from waste waters of wool washing.*) (*Communicated by Armand Coste and Louis Taupin De Rosnay.*)	3566	14th Dec. 1867	Alexander Melville Clark.
A new or improved machine for rubbing, washing and sizing ropes, cords or twines.	3588	17th Dec. 1867	Saddleton Marsters.
A new and improved composition for extracting ink and iron mould from linen and woollen fabrics. (*Communicated by Lewis Alexandre de Lobo d'Herlen.*)	3625	21st Dec. 1867	Bernard Engel.

For Washing Ores, *see* "METALS."
For Washing Bottles, *see* "BOTTLES."
For Washing Casks, *see* "CASKS."
For Washing Coals, *see* "FUEL."
For Washing Potatoes, *see* "PRESERVING FOOD."
For Washing Corn, *see* "THRASHING."
For Washing Clay, *see* "BRICKS."
For Washing Sugar, *see* "SUGAR."

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
WATER-CLOSETS, URINALS AND COMMODES.			
Improvements in the means of and apparatus for lighting railway carriages, parts of which improvements are also applicable for other purposes. (*applicable to water-closets.*)	58	9th Jan. 1867	William Thomas Sugg.
Portable or other water-closets - - - (*Communicated by David Lichtenstadt.*)	214	26th Jan. 1867	Elisabeth Lichtenstadt.
Privies or water-closets - - - - (*Communicated by Auguste Paret.*)	597	4th March 1867	William Edward Gedge.
A combined slop pail and night commode -	706	12th March 1867	Abner Parkinson. David Sweaney.
Improvements in apparatus applicable to dry closets, for disinfecting and deodorising and preparing manure, parts of which are applicable to the separating of cinders from ashes.	729	13th March 1867	James Conyers Morrell.
Construction of urinals, water-closets and other similar vessels.	823	21st March 1867	William Lorberg.
Apparatus to be applied to cisterns for preventing waste of water - - - - - - (*for water-closets.*)	902	28th March 1867	Angus Mackenzie. Samuel Robinson.
Improvements in apparatus to be used for towing ships or vessels, and in apparatus for laying submarine telegraph cables. (*or for water-closets and urinals.*)	1015	4th April 1867	James Maize Kilner.
Apparatus for regulating the supply of liquids or fluids - - - - - - (*for water-closets.*)	1199	25th April 1867	Charles Edgar Wetton. William Galsworthy.
An improved " bib," " stop " or water-closet tap or cock	1371	9th May 1867	John Bowden.
Improvements in water-closets and sinks, and in apparatus for supplying water thereto and conducting it therefrom, parts of which apparatus are applicable to other purposes.	1426	14th May 1867	Josiah George Jennings.
Construction of ship's water-closets - -	1473	18th May 1867	James Sloan.
Vessels more particularly such as are used for the reception or deposit, or both, of offal, excrement, urine or other fecal or waste matter or substances. (*Communicated by Andrew Rankin.*)	1710	11th June 1867	Henri Adrien Bonneville.
Water-closet fittings - - - -	1978	6th July 1867	Thomas Caless Thomas.
Construction and manufacture of traps for water-closets, drains and other purposes.	2253	3rd Aug. 1867	George White Dinsdale.
An improved combined bed, couch and chair for the used of invalids. (*with a pan attached.*)	2338	14th Aug. 1867	Christopher Fabian Bower.
An improved earth closet - - - -	2351	15th Aug. 1867	Augustus Fraser Baird.
Improvements in valve closet apparatus, part of which is applicable for regulating the flow of water in other cases. (*Communicated by François Taçon.*)	2621	17th Sept. 1867	Alexander Melville Clark.
Apparatus to be applied to cisterns for preventing waste of water - - - - - -	2665	21st Sept. 1867	Angus Mackenzie. Samuel Robinson.
Trough water-closets - - - -	2688	24th Sept. 1867	George Batcheldor.
Urinals - - - - - -	2776	2nd Oct. 1867	Frederick John Jeffery.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
WATER-CLOSETS, &C.—*continued.*			
Improvements in apparatus for supplying deodorizing matter to dry or earth closets, and in processes of and apparatus for treating the liquid portion of human or animal excreta after removal from such closets or from other receptacles.	2918	17th Oct. 1867	James Bannehr.
Improvements in and in apparatus for the treatment and for the reception of urine and fœcal matter.	2998	24th Oct. 1867	Robert Weare.
Water-closets - - - - -	3305	21st Nov. 1867	Henry James. Edward Drewett.
Improvements applicable to water-closets and pumps connected therewith, which latter improvements are applicable to lift-pumps generally.	3430	3rd Dec. 1867	John Hayes Wilson.
Door bolts and indicators - - - (*for water-closets.*)	3550	13th Dec. 1867	John Grundy Settle.
WATERING; SUPPLYING AND DISTRIBUTING WATER; FOUNTAINS AND WELLS.			
An improved apparatus for working "punkahs," the same being also applicable for watering tatties.	34	5th Jan. 1867	George Logan.
Improvements in apparatus used for boring and tapping gas and water mains, and in fitting service pipes or cocks thereto.	145	19th Jan. 1867	Alfred Upward.
Improvements in the construction of wash basins, and apparatus for supplying hot and cold water to the same, which improvements are also applicable to apparatus for supplying water to baths and other similar receptacles.	147	21st Jan. 1867	Robert Harlow.
Construction of water wells - - -	233	29th Jan. 1867	Alphonse Donnet.
Apparatus for regulating the supply of water to cisterns, and for preventing the bursting of water pipes.	383	11th Feb. 1867	George Hugh Kidd.
Improvements in and adaptation of cylinder printing machines to the double purpose of letter press and lithography, also a new mode of damping litho stones, and a new mode of registering and pointing in such machines.	427	15th Feb. 1867	Thomas William Nicholson.
Liquid manure or water drills - - -	1104	13th April 1867	Charles George Gillyatt.
Improvements in distributing and measuring gas, steam, water and other fluids, and in the apparatus or means employed therein.	1158	20th April 1867	Richard Hastings Frith.
Apparatus for regulating the supply of liquids or fluids - - - - -	1199	25th April 1867	Charles Edgar Wetton. William Galsworthy.
Improvements upon the instrument called the spray producer. (*see* "MEDICINES.")	1222	27th April 1867	James Dewar.
A new portable fountain - - -	1320	6th May 1867	Jean Nadal.
Improvements in waterclosets and sinks, and in apparatus for supplying water thereto and conducting it therefrom, parts of which apparatus are applicable to other purposes.	1426	14th May 1867	Josiah George Jennings.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
WATERING, &c.—*continued.*			
Apparatus for injecting and ejecting liquids and fluids.	1513	21st May 1867	Andrew Barclay.
Improvements in apparatus and in the means employed for subduing and extinguishing fires, partly applicable to other useful purposes. (*watering gardens, producing fountains, &c.*)	1614	31st May 1867	John Scott.
Construction of hand garden engines and hydropults	1640	3rd June 1867	Robert William Page.
Apparatus for obtaining motive-power from rivers or streams of water, and for facilitating boats ascending and descending rivers or streams. (*for irrigating.*) (*Communicated by Louis Roman.*)	1831	22nd June 1867	Joseph Longo Vinchiaturo le Marquis de Cosentino.
An economical system of raising running waters with apparatuses fixed or carried on boats, and without dams or steam-engines, but by the simple use of the force produced by the current of a river or watercourse. (*for towns or irrigation.*) (*Communicated by Alphonse Lalauze.*)	1868	27th June 1867	William Edward Gedge.
Improvements in boring or sinking wells and in apparatus and tools employed for that purpose.	1916	1st July 1867	Joseph Chaudron.
A liquid or composition (of a deodorizing nature) mixed with water, whereby roads, streets and other places are kept moist and free from dust, for several days after once watering - -	2482	2nd Sept. 1867	Henry Octavius William Cooper. Elizabeth Foster Cooper.
Improvements in machinery or apparatus for cutting or working rocks and other hard substances, chiefly designed for mining, tunnelling and other like operations. (*Communicated by Herman Haupt.*)	2607	16th Sept. 1867	James Asbury M'Kean.
Improved methods of constructing steam generators for engines, new furnaces connected therewith, and the mode of working them, with machinery in combination with the uses to which they are applicable. (*main and service pipes.*)	2792	4th Oct. 1867	Henry Pinkus.
Portable fountains - - - - -	2864	11th Oct. 1867	George Angell.
Improvements in treating sewage or other liquid matters so as to purify the more fluid portions thereof, and recover some of the contained matters for re-use in manufacturing processes, and in the preparation of others for use as manures - - - - - (*separating water for irrigating.*)	2894	15th Oct. 1867	Thomas Henry Baker. Thomas Woodroffe.
Improvements in sinking or forming wells, and in apparatus to be used for this and similar purposes. (*Partly communicated by Stephen Brewer.*)	2981	23rd Oct. 1867	James Lee Norton.
Arrangements or apparatus for watering and cleansing streets and roads, and for speedily removing snow.	3337	26th Nov. 1867	William Sim.
Construction of hand garden engines and hydropults	3423	2nd Dec. 1867	Robert William Page.
Improved apparatus for controlling the draught of water from constant supply pipes.	3563	14th Dec. 1867	Edward Hammond Bentall.
An improved construction of portable fountain -	3568	14th Dec. 1867	Eugene Rimmel.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
WATERING, &c.—*continued.*			
Improvements in sinking tubes or cylinders for obtaining and raising water, and in the apparatus for effecting the same.	3572	16th Dec. 1867	James Eglinton Anderson Gwynne.
Liquid meters or apparatus for measuring and registering the volume of water or other liquid flowing under pressure through pipes or ducts. (*for supply of cities.*)	3587	17th Dec. 1867	Ernest Marie Du Boys.
See also "VALVES." For Water Pipes, *see* "PIPES." For Supplying Water to Boilers, *see* "STEAM-BOILERS."			
WATERPROOF, FIREPROOF AND AIRPROOF FABRICS, BUILDINGS, &c.; WATERPROOFING, FIREPROOFING AND AIRPROOFING.			
Waterproofing or encasing cartridges and other articles liable to injury by damp.	52	8th Jan. 1867	Eustace Carey Prentice.
Waterproof and other articles of wearing-apparel -	66	10th Jan. 1867	Alfred Foucaut.
Packing bales and boxes of goods - - (*waterproof joints for packing boxes.*)	200	25th Jan. 1867	James Clark.
Fireproof safes - - - - (*Communicated by Rufus Sanborn.*)	229	29th Jan. 1867	William Snell.
Constructing the floors and roofs of houses and other buildings.	452	19th Feb. 1867	Henry Young Darracott Scott.
Construction of fire-proof floors - -	1220	27th April 1867	Daniel Birkett.
Construction of fire-proof and other ceilings and floors.	1270	1st May 1867	John Thomlinson.
An improved mode of lubricating the stuffing boxes of steam-engines and pumps, and of rendering the packing for such or other machines or apparatus waterproof and more durable than heretofore. (*Communicated by Abraham Littlewood, Francis W. Bloodgood and Henry Dirks Ostermoor.*)	1378	9th May 1867	William Edward Newton.
A new and useful fire-proof safe - - (*and bank vaults.*)	1741	14th June 1867	Hezekiah Hazard Bryant.
Improvements in the preparation of hose for conveying water, which improvements are also applicable for the preparation of woven fabrics for cart covers and other similar purposes.	2224	1st Aug. 1867	James Quin.
Certain improvements in the preparation of waterproof paper - - - -	2267	6th Aug. 1867	Thomas Whittaker. Martin Rourke.
Means employed for rendering cartridges or cartridge cases for fire-arms waterproof.	2318	12th Aug. 1867	William Thomas Eley.
Manufacture of waterproof tubes - -	2394	21st Aug. 1867	Gustave Luyckx.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
WATERPROOF, &c.—*continued.*			
A new or improved material to be used as a substitute for oiled silk, bladders, gut-skins, india-rubber, and other waterproof materials and leather.	2604	14th Sept. 1867	John Jeyes.
Improvements in the treatment and application of the residuum which results from the clarification and purification of cotton seed oil and other vegetable drying oils, and of the residuum which results from the distillation or other analogous treatment of the said material, for the manufacture and preparation of isolating preservative and anti-corrosive compositions.	2656	21st Sept. 1867	Giacomo Eduardo Marchisio.
Improvements in the construction of buildings, arches, bridges and such like structures, and in the floors of buildings and floors in other situations - - - - (*rendering fireproof.*)	2729	27th Sept. 1867	Samuel Parr. Alfred Strong.
Improvements in the economical construction of buildings, also in rendering them more secure from fire and damp, and in preserving them from decay.	2878	12th Oct. 1867	Benjamin Nicoll.
An improvement in the manufacture of bonnets and other like articles of apparel worn on the head by women and children.	2936	18th Oct. 1867	Charles Montagu.
Manufacture of pressed leather - -	2977	23rd Oct. 1867	Frederick John Bugg.
Improvements in the construction of buildings, arches, bridges, coffer-dams, wharf walls and such like structures, and in the floors and roofs of buildings, and floors in other situations - (*and rendering fireproof.*)	3080	2nd Nov. 1867	Samuel Parr. Alfred Strong.
Improvements in the manufacture of waterproof fabrics and in articles formed of the same. (*Communicated by William Augustus Torrey.*)	3136	6th Nov. 1867	William Robert Lake.
Manufacture of flexible air-tight cylinders or cases to be used as pontoons and in forming rafts.	3175	9th Nov. 1867	George Frederick Parratt.
Manufacture of grindstones and other blocks or forms of artificial stone - - - (*and rendering waterproof.*)	3193	11th Nov. 1867	Frederick Ransome. Henry Bessemer. Ernest Leslie Ransome.
Certain improvements in the manufacture of waterproof or liquid-proof paper or glazed paper or fabrics.	3437	3rd Dec. 1867	John Thorpe.
Various portions of ladies' and gentleman's wearing-apparel.	3471	6th Dec. 1867	Sigmund Goldstein.
Umbrellas and parasols - - -	3505	10th Dec. 1867	Charles Conner.
Treatment of gutta-percha, indian-rubber, Honduras gum, and the other allied gums, for the production of a preparation or preparations applicable as a varnish, cement, paint, stain, water and air proof material, solid or elastic material and for other purposes. (*Communicated by Daniel Reed.*)	3542	13th Dec. 1867	Edward Reed Sintzenich.
Improvements in brattice cloth and in its manufacture. (*making non-inflammable.*)	3561	14th Dec. 1867	John Howard Kidd.
Construction of fireproof floors for buildings -	3605	19th Dec. 1867	Edward Taylor Bellhouse.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
WATERWHEELS AND ENGINES; HYDRAULIC MOTIVE-POWER.			
An improved method of and apparatus for obtaining motive-power.	42	7th Jan. 1867	Juan Vila y Jové.
Certain improvements in meters for gas and liquids, such improved meters being also applicable as a motive-power. (*Communicated by Homer H. Stuart.*)	109	16th Jan. 1867	John Colvill.
An improved hydrostatic engine - -	120	17th Jan. 1867	Charles George Braxton.
The use or adaptation of water-pipes or syphons in combination with turbine wheels or other hydraulic engines, for the production of motive-power for propelling ships.	135	18th Jan. 1867	Richard Robert Loane Rosoman.
Apparatus for obtaining and applying motive-power (*Communicated by Gerolamo Cavanna.*)	393	12th Feb. 1867	William Clark.
Construction of motive-power engines - -	422	15th Feb. 1867	Robert Shaw.
Machinery for obtaining and applying motive-power (*Communicated by Gustav Odemar.*)	472	21st Feb. 1867	Edward Griffith Brewer.
Motive-power engines to be worked by water, steam or other fluid, and applicable to pumps.	498	23rd Feb. 1867	Henry Purnell.
Hydraulic motors - - - -	641	7th March 1867	Paul Rapsey Hodge.
Rotary engines and pumps - - - (*or water engines.*) (*Communicated by Dexter Davis Hardy.*)	755	15th March 1867	William Robert Lake.
Engines worked by steam, water and other fluids and gases under pressure.	904	28th March 1867	William Bryer Nation.
Improvements in apparatus for receiving motion or energy from fluids and for imparting it to them, and in the propulsion of vessels, and apparatus to be used for that purpose.	915	28th March 1867	Matthew Piers Watt Boulton.
An improved hydraulic engine for obtaining motive-power. (*Communicated by Charles Faive, sen^{r}.*)	953	30th March 1867	William Edward Newton.
Machinery or apparatus for obtaining and applying motive-power.	984	2nd April 1867	Jean Albert Moll.
Apparatus for propelling vessels - - (*hydraulic wheel.*)	1039	6th April 1867	Walter Watson Hughes.
Machinery or apparatus for maintaining and augmenting motive-power.	1059	9th April 1867	Hugh Forbes.
Motive-power engines - - -	1164	22nd April 1867	John Peebles.
Construction of turbines and other hydraulic engines or apparatus for obtaining motive-power, and for measuring the flow of fluids - -	1300	3rd May 1867	John Ramsbottom. Thomas Massey Pearce.
Rotatory engines and pumps - - -	1529	22nd May 1867	Ebenezer William Hughes. Thomas Howard Head.
Improvements in apparatus for measuring fluids, which improvements are also applicable for obtaining motive-power and for pumping -	1561	27th May 1867	Herbert Frost, senior. Herbert Frost, junior.
A new or improved engine or machine for obtaining and applying motive-power.	1604	30th May 1867	James Francombe.
Rotary engines and pumps - - -	1791	19th June 1867	Ebenezer William Hughes. Thomas Howard Head.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
WATERWHEELS, &c.—*continued.*			
Apparatus for obtaining motive-power from rivers or streams of water, and for facilitating boats ascending and descending rivers or streams. (*Communicated by Louis Roman.*)	1831	22nd June 1867	Joseph Longo Vinchiaturo le Marquis de Cosentino.
An economical system of raising running waters with apparatuses fixed or carried on boats, and without dams or steam-engines, but by the simple use of the force produced by the current of a river or watercourse. (*Communicated by Alphonse Lalauze.*)	1868	27th June 1867	William Edward Gedge.
Motive-power engines - - -	1941	3rd July 1867	Robert Shaw.
Improvements in machinery or apparatus for raising or forcing water or other fluids, and for the transmission of the motive-power of water, steam or other fluid or gases - - -	2278	7th Aug. 1867	Francis Carr Marshall. Hugh Stewart.
Apparatus for obtaining motive-power and for raising and forcing water and fluids.	2289	8th Aug. 1867	Johann Ernst Friedrich Lüdeke.
Improvements in or applicable to slide valves for admitting the flow or passage of steam, water or other fluids and gases when pressed - -	2300	10th Aug. 1867	John Davenport. John Kitson.
Construction of water-wheels - - -	2566	10th Sept. 1867	Aaron Kinton.
Method of and apparatus for obtaining and applying motive-power.	2633	19th Sept. 1867	William Jeremiah Murphy.
Apparatus for producing motive-power by means of compressed air, water or other liquid. (*Communicated by Jean Ventouillac, Louis Ventouillac and Edouard Jau.*)	2899	16th Oct. 1867	Alexander Melville Clark.
Apparatus for obtaining power from rivers or streams of water, and for facilitating boats ascending and descending rivers or streams. (*Communicated by Louis Roman.*)	3040	28th Oct. 1867	Victor Vicomte de Cresalles.
Apparatus for producing motive-power - - (*Communicated by William C. Stiles.*)	3090	2nd Nov. 1867	Alexander Melville Clark.
Water-meters and water-power engines - -	3369	28th Nov. 1867	Matthew Henry Larmuth. Luke Hamilton Larmuth.
Improvements in steam winches, which are also applicable to other similar purposes. (*applicable to water engines.*) (*Communicated by Joseph Corradi.*)	3425	2nd Dec. 1867	George Breen.
An improved rotary water or steam motive-power engine.	3508	10th Dec. 1867	William Bradshaw Leachman.

See also "GOVERNORS."

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
WEARING-APPAREL, MILITARY OUTFITS; TAILORS' TRIMMINGS.			
Waterproof and other articles of wearing-apparel -	66	10th Jan. 1867	Alfred Foucaut.
Certain improvements in wearing-apparel - -	610	5th March 1867	Frederick Hugh Jones.
Certain improvements in the method and means of securing buttons and buttonholes, hooks and eyes, to wearing-apparel and other objects to which such fastenings are applied.	873	26th March 1867	James Hesse.
Improvements in the manufacture of certain articles of dress or wearing-apparel, such as coats, trousers, vests, jackets, mantles, shirts, drawers and similar articles, and in apparatus employed therein, which apparatus is also applicable in figure weaving.	1020	5th April 1867	Samuel Leather.
An improved pressing iron and appliance thereto for the use of tailors, hatters, laundresses, and also for domestic use - - - - -	1065	10th April 1867	Francis Love. Thomas Davy. John Metcalf.
Improvements in buttons and in the attachment of buttons to garments and fabrics.	1214	26th April 1867	George Augustus Huddart.
Looms for weaving pile and other fabrics - - (*for waistcoats.*) (*Communicated by Jean Baptiste Beau.*)	1324	6th May 1867	William Clark.
A new mode or method of making all kinds of waistcoats reversible.	1370	9th May 1867	George Sims.
Wearing-apparel - - - - -	1522	22nd May 1867	Ralph Slazenger Moss.
Scarfs and other like articles of wearing-apparel -	1964	4th July 1867	Isaac Pick.
An improved elastic strap for garments - - (*see* "BUTTONS.") (*Communicated by Phineas Taylor Barnum.*)	1970	5th July 1867	Charles Denton Abel.
Manufacture of garments for male and female attire. (*Communicated by Leander Wolcott Boynton.*)	2529	6th Sept. 1867	John Garrett Tongue.
Method of and materials for manufacturing ammunition boxes, pontoons, baggage and other waggons and carriages, and various equipments for military, naval and civil purposes. (*knapsacks and leggings.*)	2630	19th Sept. 1867	Thomas Charles Clarkson.
Preparation or treatment of linen and cotton fabrics in order to adapt them to the manufacture of certain articles of wearing-apparel - - (*waistbands, wristbands, &c.*)	2738	28th Sept. 1867	Alfred Ward. Charles George Virgo.
An improved artificial compound chiefly designed for use as a substitute for india-rubber or caoutchouc. (*for clothing.*) (*Communicated by Austin Goodyear Day.*)	3108	4th Nov. 1867	William Robert Lake.
Manufacture of aprons, bibs and pouches, for the use of children and infants. (*Communicated by Siegfried Simon, of Berlin.*)	3170	9th Nov. 1867	Siegfried Simon.
Certain improvements in the manufacture of waterproof or liquid-proof paper or glazed paper or fabrics. (*for lining wearing-apparel.*)	3437	3rd Dec. 1867	John Thorpe.
Various portions of ladies' and gentleman's wearing-apparel.	3471	6th Dec. 1867	Sigmund Goldstein.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
WEARING-APPAREL, &c.—*continued.*			
Treatment of paper and certain woven fabrics for rendering them ornamental and durable as articles of dress, and for decorative and ornamental purposes. (*coats, waistcoats, &c.*)	3535	12th Dec. 1867	Edward Reed Sintzenich.
An improved patent invulnerable cloth armour -	3579	16th Dec. 1867	Major Chevalier Cesare Bernieri.
See also "BUTTONS." *See also* "GLOVES." *See also* "HATS." *See also* "SHIRTS." *See also* "PETTICOATS."			
WEAVING, BRAIDING, PLATTING; PREPARING FOR WEAVING.			
I.—Sizing, Warping, Beaming and Preparing Yarns for Weaving.			
Improved apparatus for regulating, controlling and for varying the speed of shafts and machinery. (*tape sizing machines.*)	51	8th Jan. 1867	Robert Robinson.
Apparatus for drying yarn - - - (*Communicated by Hugh Whitehill.*)	324	5th Feb. 1867	John Garrett Tongue.
Starching or stiffening yarns, threads, woven fabrics and tissues. (*Communicated by John Gaspard Meyer-Rauschenbach.*)	340	6th Feb. 1867	Frederik Rosenaur.
Machinery for sizing, dressing and beaming yarn and thread - - - - -	368	9th Feb. 1867	Richard Haworth. John Wellington Welch.
Chain beaming apparatus - - - -	420	15th Feb. 1867	John Pinkerton Kerr. William M^{c}Gee.
Preparation of threads and the manufacture of fabrics from the threads so prepared. (*Communicated by Stanislas Vigoureux.*)	509	23rd Feb. 1867	Clinton Edgcumbe Brooman.
Certain improvements in or applicable to sizing and dressing machines.	673	9th March 1867	William Scowcroft Lowe.
Machinery or apparatus for warping or beaming yarns or threads.	1232	29th April 1867	Thomas Watson.
Machinery for winding cops and warping from cops.	1391	10th May 1867	John Combe.
Improved arrangements and apparatus for wetting and drying wefts or yarns to prepare them for weaving - - - - -	1431	15th May 1867	Clarance Brazil. Robert Grime.
Improvements in or applicable to machines for sizing yarns or threads preparatory to weaving, and also to slubbing and roving frames and to other machines - - - -	1744	15th June 1867	James Fletcher. William Carr.
Improvements in expanding and contracting combs or wraiths for warping, beaming, dressing and other frames, and in machinery or apparatus connected therewith.	1909	29th June 1867	James Conlong.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
WEAVING, &c.—*continued.*			
Improved means and apparatus for preparing size for warps or other purposes.	2374	19th Aug. 1867	Thomas Tunstill.
An improved compound or composition to be employed in sizing and finishing woven fabrics and yarns.	2490	3rd Sept. 1867	Alfred Leigh.
Improvements in looms and in the method or process of preparing weft that will enable the plain loom to weave "checks" or stripe goods -	2926	18th Oct. 1867	John Hill. Sampson Shelley.
Improvements in warping and in machinery or apparatus employed therein - - -	3099	4th Nov. 1867	James Clarke, junior. Thomas Holt.
Improvements in joining warp ends and in apparatus employed therein - - -	3177	9th Nov. 1867	John Howard Worthington Biggs. Arthur Worthington Biggs.
Improvements in the manufacture of carpets, and in warping and preparing warps for the same, and in the machinery or apparatus to be employed therefor - - - - -	3394	29th Nov. 1867	Archibald Turner. William Edward Newton.
Apparatus to be used in joining warp ends, which apparatus may also be otherwise employed.	3426	2nd Dec. 1867	John Howard Worthington Biggs.
An improved mode of waxing warps in the process of weaving - - - - -	3447	4th Dec. 1867	Thomas Stephenson. George Balme Stephenson. Benjamin Stephenson.
Machinery for sizing cotton and other yarns -	3481	7th Dec. 1867	Clarance Brazil.
Apparatus for boiling size - - - (*for sizing warps.*)	3627	21st Dec. 1867	James Kenyon.
Improvements in steaming certain yarns and in apparatus employed therein - - -	3669	26th Dec 1867	Nathaniel Greenhalgh. William Shaw. James Mallison.
II.—Weaving Plain, Figured and Double Fabrics; Jacquards and Looms; Woven Fabrics.			
Jacquard engines - - - -	116	17th Jan. 1867	William Howarth. Mason Pearson. John Pearson.
Improved machinery or apparatus for the manufacture of "lingoes" used in looms for weaving, also in the manufacture of other articles from wire requiring to be stamped or pressed and punched.	127	18th Jan. 1867	Edward James Smith.
Certain improvements in looms for weaving - -	141	19th Jan. 1867	John Harrison. Edward Harrison.
Certain improvements in looms for weaving -	156	22nd Jan. 1867	William Harrison. John Harrison. Henry Harrison. Benjamin Croasdale.
Looms for weaving - - - -	236	29th Jan. 1867	William Dickinson.
Looms for weaving - - - -	314	4th Feb. 1867	Joseph John Harrison.
An improved fabric in imitation of the skins of animals, suitable for the manufacture of ladies' mantles, carriage rugs and other articles.	356	8th Feb. 1867	Edwin Firth.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
WEAVING, &c.—*continued.*			
Means or apparatus employed in producing fancy or figure weavings	373	9th Feb. 1867	Edwin Heywood. Edward Hinchcliffe.
Certain improvements in looms for weaving	430	16th Feb. 1867	Edward Lord.
Improvements in power loom lathes, and in take-up, feed or progressive motions for power looms and other machines	487	22nd Feb. 1867	William Walton Urquhart. Joseph Lindsay.
Preparation of threads and the manufacture of fabrics from the threads so prepared. (*Communicated by Stanislas Vigoureux.*)	509	23rd Feb. 1867	Clinton Edgcumbe Brooman.
Improvements in apparatus for expressing or extracting liquids from substances containing the same, and in the manufacture of a fabric employed therein. (*Communicated by Theodore Poizot and Alphonse Druelle.*)	531	26th Feb. 1867	Clinton Edgcumbe Brooman.
Certain improvements in the method of producing selvedge lines or borders on woven fabrics, and in apparatus connected therewith (*see* "DYEING.")	585	2nd March 1867	Samuel Frank. Richard Gooddy.
Looms for weaving	719	13th March 1867	John Boyd.
Weaving	780	18th March 1867	Demas Ellis. Matthew Hillas.
Looms for weaving	812	20th March 1867	John Leeming.
Improvements in the manufacture of textile fabrics and in the means or apparatus employed therein. (*see* "SPINNING.")	815	21st March 1867	James Booth.
Certain improvements in the method and means of securing buttons and buttonholes, hooks and eyes, to wearing-apparel and other objects to which such fastenings are applied. (*during weaving.*)	873	26th March 1867	James Hesse.
Looms for weaving	883	26th March 1867	Erastus Brigham Bigelow.
Certain improvements in the manufacture of textile fabrics called "imperials," "velvets," "velveteens," "satteens" and "drills," which improvements are also applicable for the manufacture of fabrics such as "doe-skins," tweeds and other fancy woollen cloths. ("*tie-up.*")	976	2nd April 1867	Robert Wolstenholme.
Looms for weaving figured fabrics (*Communicated by Jean Baptiste Augustin Payen-Baudouin.*)	987	2nd April 1867	William Clark.
Looms for weaving	991	3rd April 1867	James Whitehurst. Thomas Walsh.
Looms for weaving	1011	4th April 1867	Edwin Pilling.
Looms for weaving	1017	5th April 1867	Daniel Ellison.
Improvements in the manufacture of certain articles of dress or wearing-apparel, such as coats, trousers, vests, jackets, mantles, shirts, drawers and similar articles, and in apparatus employed therein, which apparatus is also applicable in figure weaving.	1020	5th April 1867	Samuel Leather.
Certain improvements in looms for weaving	1031	6th April 1867	Robert Neild. Thomas Smith. John Yates.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
WEAVING, &c.—*continued.*			
Jacquard machinery - - - (*Communicated by Jean Pierre Lachaud and Henri Simon Roussel.*)	1052	8th April 1867	Clinton Edgcumbe Brooman.
Certain improvements in looms for weaving -	1063	10th April 1867	John Ratcliffe. George Wolstencroft.
Looms for weaving - - - -	1092	12th April 1867	Richard Longden Hattersley. John Smith.
Looms for weaving - - - -	1109	13th April 1867	Richard Longden Hattersley.
Looms for weaving - - - -	1140	18th April 1867	William Holding. James Holding.
Manufacture of a certain description of woven fabric.	1189	24th April 1867	John David Brickles.
Looms for weaving - - - -	1205	26th April 1867	Edward Gerrard Fitton. Somerville Dear.
Power looms - - - -	1252	30th April 1867	George Hodgson.
Looms for weaving - - - - -	1269	1st May 1867	Erastus Brigham Bigelow.
Fancy or figure weaving machinery - -	1290	3rd May 1867	Cléo Chevron.
Manufacture of double or tubular fabrics in warp machinery.	1310	4th May 1867	John Hemsley.
Looms for weaving - - - -	1414	13th May 1867	Charles Eastwood.
Improvements in looms for weaving lastings and serdge-de-berries, applicable also for weaving other fabrics.	1457	17th May 1867	Henry Peel.
Looms for weaving hair cloth and other analogous fabrics.	1468	17th May 1867	Edward Webb.
Looms for weaving - - - - -	1488	20th May 1867	John Bottomley.
Manufacture of pile and other fabrics - - (*or twilled or figured.*)	1501	21st May 1867	John Owens.
Improvements in looms for weaving and in apparatus connected therewith.	1544	24th May 1867	Thomas William Helliwell.
Improvements in the manufacture of what are termed watered fabrics, and in apparatus connected therewith. (*Communicated by César Tavernier.*)	1555	25th May 1867	Alexander Melville Clark.
Machinery for weaving wool and other fibrous materials. (*see* "SPINNING.") (*Communicated by Celestin Martin.*)	1577	28th May 1867	Henri Adrien Bonneville.
Looms for weaving - - - - -	1636	3rd June 1867	James Fleming Brown.
Manufacture of certain descriptions of woollen cloths - - - - - (*see* "SPINNING.")	1683	7th June 1867	Robert Scott the younger. Joseph Nixon. John Beaumont.
Looms for weaving - - - -	1725	12th June 1867	David Crichton. William Donbavand. Duncan Crighton.
Looms for weaving - - - -	1774	17th June 1867	David Sowden. Reuben Calvert Stephenson.
Treatment of yarns intended to be printed - (*weaving into a loose fabric.*) (*Communicated by Charles Aubry.*)	1795	19th June 1867	John Henry Johnson.
Looms for weaving - - -	1871	27th June 1867	William Bullough.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
WEAVING, &c.—*continued.*			
Improvements in blankets used in machines for printing textile fabrics, and in the mode of joining together the ends of double-woven fabrics. (*Communicated by Seth William Baker.*)	1889	28th June 1867	Edward Joseph Hughes.
Improvements in textile fabrics and in the apparatus or means employed for effecting the same. (*see* "PRINTING.")	1906	29th June 1867	Alexander Stewart.
An improved manufacture of elastic woven fabric applicable to the manufacture of gloves, drawers, under-shirts and other elastic articles usually made from looped or knitted fabrics - -	1998	8th July 1867	Archibald Turner. William Hemsley.
Looms for weaving sponge cloths by power -	2020	10th July 1867	Daniel Collinge. John Collinge.
Power looms - - - - -	2058	12th July 1867	Erastus Brigham Bigelow.
Certain improvements in "pulley and chain" gearing to be employed for lifting or traction purposes, for moving fire bars in furnaces, or for driving mechanism. (*working chain tappets.*)	2073	15th July 1867	Thomas Wrigley.
Looms for weaving - - - - (*Communicated by George Crompton.*)	2103	17th July 1867	William Robert Lake.
Looms for weaving - - - -	2111	18th July 1867	Joseph John Harrison. Edward Harrison.
Looms for weaving - - - -	2138	22nd July 1867	David Welsh.
Looms for weaving - - - -	2201	30th July 1867	William Gadd. John Moore.
Looms for weaving - - - -	2211	31st July 1867	Mary Jane Fearnley. Charles Smith.
Improvements in looms for weaving and in means or apparatus for the manufacture of parts of such looms.	2302	10th Aug. 1867	George Hodgson.
Manufacture of gloves, undershirts, drawers, socks, stockings and other articles of clothing which are usually made from knitted or looped fabrics	2311	12th Aug. 1867	Archibald Turner. William Hemsley.
Jacquard machinery or apparatus used in the production of figured or ornamental lace and other fabrics - - - - -	2333	13th Aug. 1867	William Turney. John Ackroyd.
A new manufacture of woven fabrics imitating fabrics woven with horse hair - -	2349	15th Aug. 1867	Robert Cleland. Robert Cunningham.
Looms for weaving - - - - -	2365	17th Aug. 1867	Thomas Sagar. Thomas Richmond.
Certain improvements in looms for weaving -	2401	22nd Aug. 1867	Aaron Smalley. Benjamin Croasdale. William Laurence Lowe Leaver.
Certain improvements in the manufacture of fabrics termed "union flannels," and in other similar "union" fabrics.	2407	22nd Aug. 1867	David Howard.
An improvement in the manufacture of towels -	2424	24th Aug. 1867	John Cash. Joseph Cash, junr.
Improvements in jacquard power looms and in apparatus for driving looms.	2442	27th Aug. 1867	Erastus Brigham Bigelow.
Looms for weaving - - - -	2445	28th Aug. 1867	Thomas Sagar. Thomas Richmond.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
WEAVING, &c.—*continued.*			
Certain improvements in looms for weaving -	2448	28th Aug. 1867	William Wilson. James Cowburn.
Improvements in textile fabrics and in the apparatus or means employed for effecting the same.	2460	29th Aug. 1867	Alexander Stewart.
Looms for weaving - - - -	2527	6th Sept. 1867	Thomas William Helliwell.
Looms for weaving - - - -	2624	18th Sept. 1867	Charles Litster. George Storey.
Certain improvements in the manufacture of fabrics termed "Union flannels," and in other similar "Union" fabrics.	2658	21st Sept. 1867	David Howard.
Weaving ornamental fabrics - - -	2710	26th Sept. 1867	Andrew Taylor.
Certain improvements in looms for weaving -	2724	27th Sept. 1867	James Edward Hyde Andrew.
Looms for weaving ornamental fabrics such as leno and muslin curtains - - -	2727	27th Sept. 1867	Forrest Frew. James Speirs.
An improved loom for weaving figured fabrics -	2754	30th Sept. 1867	Caspar Honegger.
An improved species of fabric - - -	2774	2nd Oct. 1867	Matthew Wright.
Looms for weaving - - - - -	2790	4th Oct. 1867	Thomas Sagar. Thomas Richmond.
Looms for weaving - - - -	2815	7th Oct. 1867	Charles John Galloway.
Improvements in looms and in the method or process of preparing weft that will enable the plain loom to weave "checks" or stripe goods -	2926	18th Oct. 1867	John Hill. Sampson Shelley.
Power looms - - - -	2951	21st Oct. 1867	Michael Barker Nairn.
Manufacture of ornamental fabrics - -	2985	24th Oct. 1867	James Thom. Alexander Maclure.
Looms for weaving - - - -	3013	26th Oct. 1867	Robert Carter.
Power looms - - - -	3081	2nd Nov. 1867	John Wright. Michael Barker Nairn.
Looms for weaving - - - -	3098	4th Nov. 1867	Reuben Ackroyd. George Hodgson.
Machinery or apparatus for producing plain and fancy weavings in bobbin net or twist lace machines - - - - - -	3103	4th Nov. 1867	Thomas Wright. Isaac Fox.
Certain improvements in looms for weaving -	3113	5th Nov. 1867	Thomas Briggs, junior. Walter Edward Yates.
Looms for weaving - - - -	3134	6th Nov. 1867	William Pearson. William Spurr.
Looms for weaving - - - -	3152	8th Nov. 1867	Thomas Blackburn.
Looms for weaving - - - -	3236	15th Nov. 1867	James Crossley.
Manufacture of woven fabrics - - -	3273	19th Nov. 1867	Robert Ward. Thomas Travis.
Manufacture of mohair and similar fabrics -	3540	12th Dec. 1867	James Robinson.
Apparatus to be applied to looms for weaving -	3547	13th Dec. 1867	William McIlwraith. Joseph Bonner.
Looms for weaving - - - -	3549	13th Dec. 1867	Adam Bullough.
Improvements in brattice cloth and in its manufacture. (*see* "WATERPROOF.")	3561	14th Dec. 1867	John Howard Kidd.
Manufacture of fabrics to be made into skirts -	3618	19th Dec. 1867	William Black Pullar.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
WEAVING, &c.—*continued.*			
Improvements in blankets used in machines for printing textile fabrics, and in the mode of joining together the ends of double-woven fabrics. (*Communicated by Seth William Baker.*)	3674	27th Dec. 1867	Edward Joseph Hughes.
Looms for weaving - - - - -	3699	30th Dec. 1867	Thomas Robertshaw. Jonas Robertshaw. James Greenwood.
III.—Weaving Carpets, Velvets and other Pile and Terry Fabrics; Carpet Looms.			
Manufacture of jacquard tapestry, and plain and printed terry and cut pile carpets, by the application of materials not hitherto used in such manufacture.	53	8th Jan. 1867	William Wood.
Looms for the manufacture of silk and other velvets	215	26th Jan. 1867	Edouard Bellard.
Power looms for weaving terry and cut pile fabrics -	237	29th Jan. 1867	Peter Jack, junior. Alameth Coulthurst.
Machinery for the manufacture of carpets, coach-lace and other terry or cut-pile fabrics - -	899	27th March 1867	Archibald Turner. William Edward Newton.
Looms for weaving pile and other fabrics - - (*Communicated by Jean Baptiste Beau.*)	1324	6th May 1867	William Clark.
Manufacture of pile and other fabrics - -	1501	21st May 1867	John Owens.
Manufacture of printed "tapestry" carpets -	1607	30th May 1867	William Wood.
Manufacture of Turkey, Wilton, Brussels, tapestry and other terry and cut-pile carpets and rugs.	2014	9th July 1867	William Wood.
A new and improved means of utilizing all the parts of all sorts of feathers. (*for making carpets.*) (*Communicated by Jean Louis Frédéric Bardin.*)	2247	3rd Aug. 1867	Charles Touaillon, junior.
Looms for weaving Scotch or ingrain carpets -	2552	9th Sept. 1867	John Marsden.
Manufacture of pile and other fabrics - -	3292	21st Nov. 1867	John Owens.
Improvements in the manufacture of carpets, and in warping and preparing warps for the same, and in the machinery or apparatus to be employed therefor - - - -	3394	29th Nov. 1867	Archibald Turner. William Edward Newton.
IV. — Knitting; Lace Making; Stocking Frames; Warp Fabrics; Nets and Meshed Fabrics.			
Knitting machines - - - - -	38	5th Jan. 1867	Isaac Wixom Lamb.
Looms for knitting - - - - (*Communicated by Augustus Celanus Carey and Hugh K. Moore.*)	93	14th Jan. 1867	William Edward Newton.
Manufacture of lace - - - (*Communicated by Désiré Sival and Léon Sival.*)	129	18th Jan. 1867	Clinton Edgcumbe Brooman.
Machines for making machine knitting needles and other needles.	302	2nd Feb. 1867	Charles Pinckney Sumner Wardwell.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
WEAVING, &c.—*continued.*			
Preparation of threads and the manufacture of fabrics from the threads so prepared. (*knitted to be afterwards unknitted.*) (*Communicated by Stanislas Vigoureux.*)	509	23rd Feb. 1867	Clinton Edgcumbe Brooman.
An improvement in the manufacture of towels -	513	25th Feb. 1867	John Cash. Joseph Cash, jun^{r}.
Manufacture of figured lace in twist lace machines	544	27th Feb. 1867	Samuel Butler.
A new and useful fabric for elastic stockings, stays or corsets, bandages and other similar and analogous articles.	592	2nd March 1867	Anne Catherine Laurys.
Lace, warp, knitting or other similar machinery for the manufacture of looped and fast-knotted fabrics, part of such machinery being applicable to sewing, stitching or quilting purposes. (*Communicated by Charles Keenan, John Keenan, William Birks, senior, and William Birks, jun^{r}.*)	923	29th March 1867	John Garrett Tongue.
Manufacture of boot elastic web and other fabrics (*on a lace loom.*)	939	29th March 1867	William Gadd. Louis Baillon.
Manufacture of knitted fabrics - - -	1298	3rd May 1867	Samuel Thacker.
Manufacture of double or tubular fabrics in warp machinery.	1310	4th May 1867	John Hemsley.
Means or apparatus for the manufacture of looped fabrics - - - -	1510	21st May 1867	Samuel Hall Foster. Thomas Bunney.
Twist lace machinery - - - -	1666	6th June 1867	Edwin Ellis.
Manufacture of nets and netting - - (*Communicated by Benjamin Arnold and William John Hooper.*)	2140	23rd July 1867	John Henry Johnson.
Circular knitting frames - - -	2325	13th Aug. 1867	Henry Moses Mellor.
Jacquard machinery or apparatus used in the production of figured or ornamental lace and other fabrics - - - -	2333	13th Aug. 1867	William Turney. John Ackroyd.
Manufacture or production of lace made on bobbin net or twist lace machines - - -	2613	17th Sept. 1867	William Brailsford. Joseph Gadsby.
Circular knitting frames - - -	2628	18th Sept. 1867	Henry Moses Mellor.
Certain improvements in the manufacture of fabrics termed "Union flannels," and in other similar "Union" fabrics.	2658	21st Sept. 1867	David Howard.
Manufacture or production of lace or weavings made on bobbin net or twist lace machines -	2706	25th Sept. 1867	John Kirk. John Kirk the younger.
Knitting-machines - - - (*Communicated by Jules Nicolas Poivret.*)	2877	12th Oct. 1867	John Henry Johnson.
Manufacture of lace in twist-lace machines -	2885	14th Oct. 1867	William Redgate. Thomas Marriott.
Manufacture of lace - - - - (*Communicated by Désiré Sival and Léon Sival.*)	3033	28th Oct. 1867	Clinton Edgcumbe Brooman.
Manufacture of lace in twist lace machines - -	3091	2nd Nov. 1867	Thomas Butler Cutts. Francis William Brooksbank.
Machinery or apparatus for producing plain and fancy weavings in bobbin net or twist lace machines - - - - -	3103	4th Nov. 1867	Thomas Wright. Isaac Fox.
Knitting machinery - - -	3190	11th Nov. 1867	William Campion. William Campion.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
WEAVING, &c.—*continued.*			
Knitting machines - - - - - (*Communicated by Samuel Larkin.*)	3265	18th Nov. 1867	Edward Thomas Hughes.
Manufacture of lace in twist lace machines - -	3444	3rd Dec. 1867	Frederick Rainford Ensor.
Ornamenting lace and other textile fabrics - (*see* "CEMENTED FABRICS.")	3452	4th Dec. 1867	Francis Bryan Baker. Leonard Lindley.
A new or improved material to be employed in the manufacture of cord, rope, lace, paper, cardboard, pasteboard and other articles. (*see* "FIBRES.")	3520	11th Dec. 1867	Faustino Vita.
Manufacture of sinkers for hosiery and other machines - - - -	3567	14th Dec. 1867	Edmund Tatham. Amos Tatham.
Circular knitting machines - - - (*Communicated by George Johnstone.*)	3622	20th Dec. 1867	George Davies.
Manufacture of warp fabrics - - -	3665	24th Dec. 1867	Samuel Lennard. Frederick Lennard.
V.—Weaving Fringes, Ribbons, Producing Braid; Platting.			
Sewing machinery or apparatus for fringing shawls, mantles or similar articles. (*see* "SEWING.")	113	16th Jan. 1867	Joseph Craven.
An improved manufacture of brace fabric -	280	1st Feb. 1867	Samuel Hall Foster.
"Banding" for driving the spindles of machines used for spinning, doubling and twisting cotton, wool, flax, silk and other fibrous materials. (*tubular braided fabric.*)	877	26th March 1867	Thomas Unsworth.
Machinery for the manufacture of carpets, coach-lace and other terry or cut-pile fabrics -	899	27th March 1867	Archibald Turner. William Edward Newton.
Manufacture of boot elastic web and other fabrics -	939	29th March 1867	William Gadd. Louis Baillon.
Certain improvements in apparatus for covering woollen or fibrous yarns with an outer thread or yarn. (*see* "SPINNING.")	1047	8th April 1867	George Frederick James.
Improvements in the manufacture of elastic cords or bands applicable to various purposes, such as for driving bands, blind cords, and other analogous purposes in which a certain degree of elasticity is required.	1133	17th April 1867	Archibald Turner.
Means or apparatus for the production of narrow weavings.	1187	24th April 1867	Thomas Tivey.
Ribbon looms - - - - - (*Communicated by Antony Barrallon.*)	1274	2nd May 1867	Henri Adrien Bonneville.
Production of ornamental textile fabrics - - (*trimmings, fringes, gymps.*)	1807	20th June 1867	William Clarke.
Machinery for manufacturing cordage, webbing and other like articles. (*Communicated by Jesse Fewkes.*)	1933	3rd July 1867	William Robert Lake.
Apparatus for operating the shuttles of looms for weaving narrow fabrics - - -	2017	9th July 1867	Henry English. John Farndon.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
WEAVING, &c.—*continued.*			
Fringes (*see* "CEMENTED FABRICS.")	2560	10th Sept. 1867	John Holliday.
Machinery or apparatus employed in the manufacture of braid. (*Communicated by George Rehfuss.*)	2799	4th Oct. 1867	John Henry Johnson.
Manufacture of ribbons (*Communicated by Rudolph Klemme.*)	2833	8th Oct. 1867	Ernest George Wolffgang.
Means or apparatus for the manufacture of narrow fabrics	2883	14th Oct. 1867	William Gadd. Benjamin Walker.
Improvements in the manufacture of circular webbing or gasket, applicable as packing for steam-engines, as covering for telegraph cables and other useful purposes, and in the machinery employed therein.	3046	29th Oct. 1867	Joseph Threlfall Carter.
Manufacture of looped fabric for braces	3114	5th Nov. 1867	Samuel Hall Foster. Thomas Bunney.
Apparatus for operating the shuttles of looms for weaving narrow fabrics	3276	19th Nov. 1867	Henry English. John Farndon.
An improved braiding machine	3672	27th Dec. 1867	Eugène Germain Rafer. Ernest Edmond Rafer.
VI.—Shuttles and Weft Forks.			
Manufacture of weft forks used in looms for weaving	170	23rd Jan. 1867	Samuel Cook. George Cook.
Looms for weaving (*Communicated by George Crompton.*)	2103	17th July 1867	William Robert Lake.
Looms for weaving	2138	22nd July 1867	David Welsh.
Looms for weaving	2201	30th July 1867	William Gadd. John Moore.
Improvements in looms for weaving and in means or apparatus for the manufacture of parts of such looms. (*shuttle chambers.*)	2302	10th Aug. 1867	George Hodgson.
Certain improvements in looms for weaving	2448	28th Aug. 1867	William Wilson. James Cowburn.
Looms for weaving	2624	18th Sept. 1867	Charles Litster. George Storey.
Looms for weaving (*weft forks.*)	2790	4th Oct. 1867	Thomas Sagar. Thomas Richmond.
Looms for weaving	2815	7th Oct. 1867	Charles John Galloway.
An improved shuttle eye	2928	18th Oct. 1867	William Henry Tasker.
Construction of shuttle tongues	2974	23rd Oct. 1867	Jesse Haddock.
Manufacture of shuttles employed in weaving	3100	4th Nov. 1867	Rowland Baguley.
Looms for weaving	3236	15th Nov. 1867	James Crossley.
Improvements in shuttles employed in weaving, and in bobbins used therewith	3557	14th Dec. 1867	John Sharples. James Schofield.
Shuttles for looms for weaving	3644	23rd Dec. 1867	Robert Crawshaw.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
WEAVING, &c.—*continued.*			
VII.—Temples, Pickers, Healds and Reeds.			
Weavers' harness - - - - (*Communicated by Cullen Whipple.*)	316	4th Feb. 1867	George Haseltine.
Manufacture of healds employed in looms for weaving - - - - -	716	13th March 1867	William James Heath. John Hargreaves, jun^{r}.
An improved varnish or composition to be applied to healds of looms for weaving and for other similar uses.	744	15th March 1867	James Robinson Parkinson.
Looms for weaving - - - - (*healds.*)	1140	18th April 1867	William Holding. James Holding.
Healds or heddles used in looms for weaving -	1175	23rd April 1867	David Whittaker. Benjamin Croasdale.
Looms for weaving - - - - (*distending the cloth during weaving.*)	1269	1st May 1867	Erastus Brigham Bigelow.
Looms for weaving pile and other fabrics - - (*metallic healds.*) (*Communicated by Jean Baptiste Beau.*)	1324	6th May 1867	William Clark.
Manufacture of single and double box pickers for looms.	1387	10th May 1867	Allan Cooper.
Improvements in pickers and in the method of manufacture and apparatus employed therein -	1508	21st May 1867	Samuel Holt. Greenwood Holt.
An improved arrangement of reeds to be used in looms for weaving.	1675	7th June 1867	David Rorison.
Machinery for knitting "healds" - -	1688	8th June 1867	James Collier. Ralph Howarth. William Cryer.
Improved machinery or apparatus to be employed in the manufacture of wire healds for looms for weaving.	1870	27th June 1867	James Gabbott.
An improvement in the harness of jacquard engines	1895	28th June 1867	John Anderson. Thomas Anderson.
Reeds and healds used in weaving - - -	2068	13th July 1867	John Carter Ramsden.
Looms for weaving - - - - (*Communicated by George Crompton.*)	2103	17th July 1867	William Robert Lake.
An improved machine for manufacturing weavers' harness. (*Communicated by Joseph Sprague Winsor and William Walter Fletcher.*)	2214	31st July 1867	William Robert Lake.
Reeds for weaving - - - - (*Communicated by Laurent Perret.*)	2269	6th Aug. 1867	Alexander Melville Clark.
Improvements in the construction and manufacture, and in tools for the manufacture of pickers used in looms for weaving.	2306	10th Aug. 1867	Richard Edmondson.
Healds or heddles used in looms for weaving -	2416	23rd Aug. 1867	David Whittaker.
Certain new and useful improvements having reference to wire heddles for loom harness, and particularly the construction, manufacture and support of such. (*Partly communicated by John Ashworth.*)	2551	9th Sept. 1867	Darius Chase Brown.
Certain improvements in looms for weaving - -	3113	5th Nov. 1867	Thomas Briggs, junior. Walter Edward Yates.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
WEAVING, &c.—*continued.*			
VIII.—Letting off and Taking-up Motion; Stopping Looms.			
Certain improvements in looms for weaving (*taking up rollers.*)	141	19th Jan. 1867	John Harrison. Edward Harrison.
Improvements in power loom lathes, and in take-up, feed or progressive motions for power looms and other machines	487	22nd Feb. 1867	William Walton Urquhart. Joseph Lindsay.
Looms for weaving (*taking up.*)	719	13th March 1867	John Boyd.
Looms for weaving (*let off and stop motions.*)	883	26th March 1867	Erastus Brigham Bigelow.
Looms for weaving (*letting off, take-up and break.*)	991	3rd April 1867	James Whitehurst. Thomas Walsh.
Looms for weaving	1205	26th April 1867	Edward Gerrard Fitton. Somerville Dear.
Machinery or apparatus for warping or beaming yarns or threads. (*break.*)	1232	29th April 1867	Thomas Watson.
Looms for weaving pile and other fabrics (*weft breaking gear.*) (*Communicated by Jean Baptiste Beau.*)	1324	6th May 1867	William Clark.
Looms for weaving (*letting off motion.*)	1414	13th May 1867	Charles Eastwood.
Improvements in looms for weaving and in apparatus connected therewith. (*stop motion.*)	1544	24th May 1867	Thomas William Helliwell.
Looms for weaving (*stopping the loom.*)	1636	3rd June 1867	James Fleming Brown.
Looms for weaving (*stopping.*)	1871	27th June 1867	William Bullough.
Looms for weaving	2111	18th July 1867	Joseph John Harrison. Edward Harrison.
Looms for weaving	2211	31st July 1867	Mary Jane Fearnley. Charles Smith.
Looms for weaving	2365	17th Aug. 1867	Thomas Sagar. Thomas Richmond.
Looms for weaving (*stop motion.*)	2527	6th Sept. 1867	Thomas William Helliwell.
Looms for weaving Scotch or ingrain carpets (*letting off.*)	2552	9th Sept. 1867	John Marsden.
Looms for weaving (*taking up motion.*)	2790	4th Oct. 1867	Thomas Sagar. Thomas Richmond.
Certain improvements in looms for weaving	3113	5th Nov. 1867	Thomas Briggs, junior. Walter Edward Yates.
Looms for weaving	3152	8th Nov. 1867	Thomas Blackburn.
Improvements in the manufacture of carpets, and in warping and preparing warps for the same, and in the machinery or apparatus to be employed therefor (*letting off warp.*)	3394	29th Nov. 1867	Archibald Turner. William Edward Newton.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
WEIGHING-MACHINES, SCALES, INDICATING WEIGHT.			
Weighing machines - - - - -	68	11th Jan. 1867	John Silvester.
Certain novel and improved combinations and arrangements of differential wheel gearing, and its application to various purposes - - - (*for weighing.*)	125	18th Jan. 1867	Charles Frederick Cooke. John Standfield.
Manufacture of envelope cases, blotting books and other articles, commonly called "writing" or "library sets," and other similar articles. (*letter balances.*)	305	4th Feb. 1867	George William Betjemann.
Improvements in call bells, letter balances and weighing machines, which are applicable to one or more of the afore-mentioned articles separately or combined - - - - -	584	2nd March 1867	Robert Wilson. William Henry Bailey.
Construction of the standards and other parts of scales and beams for weighing purposes, and for the mode of connecting the same.	1397	11th May 1867	John Walker.
Apparatus for elevating or moving grain, and for weighing and moving grain.	1717	11th June 1867	Stephen Wells Wood.
Improvements applicable to apparatus for raising and lowering weights, for indicating and registering the amount lifted, or for indicating only the said weight - - - - -	1816	21st June 1867	Follett Charles Hennet. Daniel Spink.
Spring balances - - - - - -	2470	30th Aug. 1867	John Silvester.
Improvements in apparatus for rendering innocuous the momentum of heavy bodies so as to prevent injury and damage from concussion, applicable to ships' cables, cranes, windlasses, capstans, hoists, lifts, weighing machines, ship and fort armour, to training guns, to railway trains, station buffers, fenders to pier-heads, gangways, breakwaters and other similar structures, which apparatus is also applicable for storing and accumulating power, which may be used for throwing projectiles, raising or moving heavy weights, such as ships, stranded or sunken vessels, propelling carriages and other purposes.	3302	21st Nov. 1867	William Graham McIvor.
An improved weighing apparatus - - -	3494	7th Dec. 1867	Joseph Alvin Munn.
WHEELS FOR CARRIAGES, RAILWAY WHEELS; WHEEL TIRE, &c.			
Improvements in machine tools for manufacturing parts of locomotive engines, parts of which improvements are also applicable to other similar or analogous purposes. (*drilling railway wheel tire.*)	334	6th Feb. 1867	Stephen Alley.
Machinery and apparatus for supporting, moving and forging heavy masses of metal. (*wheel tire.*)	342	7th Feb. 1867	John Ramsbottom.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
WHEELS, &C.—*continued.*			
Mounting wheels on axles, the same being specially applicable to railway wheels.	377	9th Feb. 1867	Charles William Dixon.
Wheels for carriages and other vehicles - - (*Communicated by John Raddin.*)	470	21st Feb. 1867	George Haseltine.
Manufacture and construction of wheels - -	567	28th Feb. 1867	George Fitzjames Russell.
Manufacture of tyres for railway and other wheels	668	8th March 1867	James Newman.
Steam-engines and boilers - - - - -	771	16th March 1867	Edward Ellis Allen.
Improvements in the casting of Bessemer or crucible steel hoops for the tyres of railway wheels, such improvements being applicable for casting cylindrical forms in Bessemer or crucible steel for other purposes - - - - - -	911	28th March 1867	David Foster. Rupert Cooke.
Improvements in the construction of railways and trucks to be employed thereon, specially for agricultural purposes. (*forming truck wheels.*)	1056	9th April 1867	Robert Alexander Rooney.
Construction of wheels - - - - -	1160	20th April 1867	John Atkinson.
Velocipedes - - - - - -	1161	20th April 1867	William George Crossley.
Manufacture of steel tyres, rails, axles, bridge links, shafting and other articles where uniformity in the wearing surfaces and increased durability is required.	1327	6th May 1867	George Wilson.
An improvement in metal wheels for railroad cars and other vehicles.	1439	15th May 1867	George Nimmo.
Improvements in wheeled carriages and in the construction of wheels and springs for such carriages and other vehicles - - - -	1441	15th May 1867	George Coles. James Archibald Jaques. John Americus Fanshawe.
A new or improved tyre or guard for wheels of reaping, mowing and other machines.	1563	27th May 1867	William Affleck.
Wheel carriages and other vehicles - - - -	1681	7th June 1867	Joseph Offord.
An improvement in the manufacture of tyres for railway wheels.	1981	6th July 1867	Henry Brook Woodcock.
Railway wheels - - - - - -	2511	5th Sept. 1867	William H. Kitson.
Means of securing wheels, pulleys, cranks and other articles on their shafts or axles.	2515	5th Sept. 1867	John Ford.
Apparatus for finishing parts of locomotive wheels	2591	13th Sept. 1867	James Reid.
Manufacture of railway wheels - - - - (*Communicated by Cornelius Kingsland.*)	2739	28th Sept. 1867	John Henry Johnson.
Locomotive engines and their permanent ways -	2755	30th Sept. 1867	John Clark.
An improved mode of preparing iron for the manufacture of various articles where great strength and capability of resistance to tensile strain or torsion is required. (*for railway wheel tires.*) (*Communicated by Michel Pawlowitch Lwoff.*)	2865	11th Oct. 1867	William Edward Newton.
Wheels of traction engines - - - -	2875	12th Oct. 1867	Henry Forman.
Improvements in locomotive engines, vehicles and appendages thereto, for better and safer working on railways, tramways and common roads.	2907	17th Oct. 1867	William Bridges Adams.
Mounting or applying wheels to road carriages of all kinds.	2967	22nd Oct. 1867	Griffith Jones.
An improved wheel for steam carriages to be used on common roads.	2986	24th Oct. 1867	Robert William Thomson.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
WHEELS, &c.—*continued.*			
An improvement in roller or anti-friction journal boxes or bearings, applicable also to the hubs of wheels. (*Communicated by Edward Wadhams.*)	3123	5th Nov. 1867	Alfred Vincent Newton.
Improvements in tramways or railways for streets or roads, and wheels adapted to run thereon.	3143	7th Nov. 1867	Charles Herbert Bright.
Manufacture of wheels for railway carriages and other rolling stock.	3274	19th Nov. 1867	Edward Reynolds.
Manufacture of the tyres of railway and other wheels - - - - - -	3356	27th Nov. 1867	William Fowler. John Griffiths.
Certain new and useful improvements in the running mechanism of car and carriage trucks of any nature.	3363	27th Nov. 1867	Samuel Augustus Chase.
Machinery and apparatus for heating and forming metals for railway wheel tyres.	3482	7th Dec. 1867	Paul Rapsey Hodge.
Railway wheels - - - - - -	3488	7th Dec. 1867	James Rae. George Miller.
Manufacture or production of wheels used for carriages or other vehicles.	3524	12th Dec. 1867	John Goodman.
Securing the tyres of railway engine and carriage wheels.	3525	12th Dec. 1867	John Octavius Butler.
WHEELS FOR MACHINERY; COG-WHEELS, PULLEYS, CAMS, &c.			
Certain novel and improved combinations and arrangements of differential wheel gearing, and its application to various purposes - - (*for wheel cutting.*)	125	18th Jan. 1867	Charles Frederick Cooke. John Standfield.
Wheel gearing - - - - - - (*Communicated by Carl Vilhelm Schröder and Frederik Julius Jörgensen.*)	208	26th Jan. 1867	Peter Jensen.
Forming shafts, rollers, drums and wheels with india-rubber surfaces.	289	2nd Feb. 1867	John Poole.
Machinery for cutting and polishing metals - (*wheels and pulleys.*)	410	14th Feb. 1867	John Thompson.
An improved steam driving wheel for imparting rotary motion to shafts.	536	27th Feb. 1867	William Stobbs.
Machinery for grinding, crushing, hulling or shelling various kinds of farm or vegetable produce, applicable also to the crushing or grinding of minerals and other hard substances. (*form of teeth in cutting wheels.*)	566	28th Feb. 1867	John Bellerby the younger.
Machines for "grinding" or tearing up rags and other fibrous substances.	714	12th March 1867	William Wood.
Construction of wheel moulding machines -	715	13th March 1867	Joseph Willcock. Samuel Mason, jun^{r}.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
WHEELS, &c.—*continued.*			
Improvements in machinery or apparatus for raising, lowering and moving heavy bodies, which improvements are also applicable for operating punching machines, screw presses, and the feed motion of circular and other saws, and wood planing machines. (*pulley blocks.*)	822	21st March 1867	James Alfred Limbert.
Improvements in rotary digging machines and in teeth for the same. (*Communicated by George Granville Lobdell.*)	859	25th March 1867	George Davies.
Machinery for grinding and polishing metal and other surfaces. (*friction pulley.*)	1105	13th April 1867	William Gregory.
Improvements in ploughs and other agricultural implements, parts of which improvements are also applicable to wheeled carriages.	1130	16th April 1867	Robert Boby.
Improvements in or applicable to machines for sizing yarns or threads preparatory to weaving, and also to slubbing and roving frames and to other machines - - - - - (*expanding pulleys.*)	1744	15th June 1867	James Fletcher. William Carr.
Blind pulleys - - - - - -	1800	20th June 1867	Frederick George Newton Perrett.
Certain improvements in "pulley and chain" gearing to be employed for lifting or traction purposes, for moving fire-bars in furnaces, or for driving mechanism.	2073	15th July 1867	Thomas Wrigley.
Forming shafts, rollers, drums and wheels with india-rubber surfaces.	2232	2nd Aug. 1867	John Poole.
Means of securing wheels, pulleys, cranks and other articles on their shafts or axles.	2515	5th Sept. 1867	John Ford.
Machinery for polishing, grinding and edging slabs of marble, slate and other minerals. (*Communicated by Stinson Hagaman.*)	2572	11th Sept. 1867	Alexander Melville Clark.
Apparatus for hauling or winding ropes - - (*clip pulley.*)	2759	1st Oct. 1867	James Grafton Jones.
Improvements in the construction of railways and railway carriages, and in the means for propelling the said carriages. (*driving pulley.*) (*Communicated by Charles Thompson Harvey.*)	2896	15th Oct. 1867	William Robert Lake.
Machinery or apparatus applicable to cages or hoists used in mining or lifting machines. (*eccentric pulleys.*)	2934	18th Oct. 1867	John King.
Machinery for preparing and spinning cotton or other fibrous substances.	2947	19th Oct. 1867	Ellis Butterworth.
Centrifugal machines for separating liquid from solid matter. (*forming the driving pulley.*) (*Communicated by David M^{c}Colley Weston.*)	3041	28th Oct. 1867	William Robert Lake.
Certain improvements in the method of casting, forming or producing toothed wheels or gearing, to be employed in machinery for preparing, spinning and twisting cotton or other fibrous substances - - - - - -	3063	31st Oct. 1867	William Hall. John Wren. James Brandwood.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
WHEELS, &c.—*continued.*			
Machines for pressing or moulding bricks, tiles or other blocks. (*mould wheel.*) (*Communicated by John North.*)	3196	12th Nov. 1867	Henri Adrien Bonneville.
Improvements in machinery for spreading grasses, part of which improvements are also applicable to machines for cutting and collecting grasses or corn. (*travelling wheels.*)	3475	6th Dec. 1867	William Newzam Nicholson.
Presses for stamping or endorsing - - (*forming the type wheels.*) (*Communicated by Edouard Cornélis.*)	3516	11th Dec. 1867	Alexander Melville Clark.
An improved sheave or pulley for ships' blocks or other purposes.	3521	11th Dec. 1867	Georges Henry Nick.
Improvements in means or apparatus for propelling canal boats and other vessels, parts of which improvements are applicable to other purposes. (*pulley drums.*) (*Communicated by Baron Oscar de Mesnil and Max Eyth.*)	3604	18th Dec. 1867	Hunter Henry Murdoch.
WINDING, REELING AND BALLING YARN AND THREAD.			
Improvements in apparatus and in the mode of operation for winding, tarring, sizing, polishing or putting a finish on and singling machine-spun and other yarns, in the manufacture of rope, cordage and lines of every description and material - - - - - -	245	29th Jan. 1867	Hiram Craven. James Speeding.
Self-oiling spindles for spinning, doubling and winding frames. (*Communicated by Francis Rabbeth and John Edwin Atwood.*)	298	2nd Feb. 1867	John Garrett Tongue.
Machinery for the manufacture of speckled or spotted threads. (*Communicated by Veran Sabran and Gaston Jesse.*)	489	22nd Feb. 1867	Clinton Edgcumbe Brooman.
Preparation of threads and the manufacture of fabrics from the threads so prepared. (*threads knitted instead of formed into skeins.*) (*Communicated by Stanislas Vigoureux.*)	509	23rd Feb. 1867	Clinton Edgcumbe Brooman.
An improved combined reel frame and thread cutter	598	4th March 1867	Richard Edward Keen.
Machinery for winding yarn and thread - -	682	11th March 1867	Henry Cheetham Hill.
An improved combination of apparatus for winding and twisting certain species of yarns.	712	12th March 1867	William Hall.
Printing yarns - - - - - - (*whilst being wound.*)	850	23rd March 1867	William James Hanson.
Winding up thread and other filaceous fabrics - (*see* "SPINNING.")	1060	9th April 1867	Augustin Morel.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
WINDING, &c.—*continued.*			
Improvements in machines for winding yarn or thread on to bobbins, spools or similar surfaces, parts of which improvements are applicable to self-acting mules and like machines for spinning, doubling or twisting fibrous materials.	1128	16th April 1867	William Weild.
Machinery for winding yarns, and also for printing the same simultaneously with the process of winding, at option - - - - - (*see* "SPINNING.")	1135	17th April 1867	Joseph Wilcock Dalby. George Odam Chapman.
Improvements in winding or balling, and in the manipulation of twisted fibrous substances.	1241	29th April 1867	James Combe.
Machinery or apparatus for building cops in winding machines.	1357	8th May 1867	James Gaskell.
Machinery for winding cops and warping from cops.	1391	10th May 1867	John Combe.
Improvements in reels or receivers upon which threads, silks or other fibrous material, in connection with needles (threaded or otherwise) are arranged, as also in the arrangement of needles threaded with any fibrous material, for the purpose of facilitating the use or uses of the same for all purposes of needle-work.	1633	3rd June 1867	William Pidding.
Means of communicating motion to the spindles of spinning, roving, doubling, twisting, winding and other similar machines.	2096	17th July 1867	Auguste de Smet.
Doubling and winding machines - - - (*Communicated by John Dollfus-Mieg.*)	2299	10th Aug. 1867	Henry Bernoulli Barlow.
Improvements in spools, reels or bobbins, and in the method of manufacturing the same.	2390	21st Aug. 1867	William Bostock.
Machinery for manufacturing "chenille" - - (*winding off.*)	2590	13th Sept. 1867	Pierre Raymond Couchoud.
Machinery for spinning wool and other fibrous materials. (*also reeling and spooling.*) (*Communicated by Auguste Seguier.*)	2758	1st Oct. 1867	Henri Adrien Bonneville.
Improvements in looms and in the method or process of preparing weft that will enable the plain loom to weave "checks" or stripe goods - (*winding or reeling yarn.*)	2926	18th Oct. 1867	John Hill. Sampson Shelley.
Improvements in placing, arranging or fixing needles and threads and other like fibrous materials on to reels or receivers, so as to render them more convenient for use, also in the manufacture and forms of such reels or receivers, and in the materials thereof.	3436	3rd Dec. 1867	William Pidding.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
WINDOW BLINDS, SUN BLINDS, FIRE-SCREENS.			
Construction of fire screens, fans, parasols, sun shades and such like articles - - -	104	15th Jan. 1867	Edward Brown Taylor. Frederick Winter.
Tinting or colouring the surface of paper or other materials or fabrics. (*for shades or curtains.*) (*Communicated by George Streat.*)	121	17th Jan. 1867	William Edward Newton.
Improvements in the construction of window sashes and sash frames, and in the arrangement of roller blinds thereto.	273	31st Jan. 1867	Thomas Bullivant.
Venetian blinds - - - - -	350	7th Feb. 1867	Frederick Christopher Leader.
Manufacture of iron outside venetian blinds -	889	27th March 1867	Jean Marie Jomain.
Improvements in the manufacture of elastic cords or bands applicable to various purposes, such as for driving bands, blind cords, and other analogous purposes in which a certain degree of elasticity is required.	1133	17th April 1867	Archibald Turner.
An improved apparatus for preventing the access of insects to the interior of dwellings, and to pictures, mirrors and articles of furniture. (*net attached to open windows.*) (*Communicated by John George De Coursey.*)	1238	29th April 1867	John Henry Johnson.
Improvements in apparatus for securing cords and straps such as are used for raising and lowering window blinds, ventilators, carriage windows and for other similar purposes - - -	1696	8th June 1867	Robert Edward Pepys. James Warburton.
Improvements in securing and adjusting windows, blinds and shades, doors and shutters, and in the apparatus employed therefor.	1708	10th June 1867	Robert Logan.
Blind pulleys - - - - -	1800	20th June 1867	Frederick George Newton Perrett.
Construction of venetian blinds or shutters -	1919	1st July 1867	Peter Ironside.
Improvements in machinery for cutting grooves in knotch boards of stairs, ladder strings, uprights for louvre boards, and in other articles requiring such grooves.	2332	13th Aug. 1867	Thomas Walker.
Manufacture of appliqué embroidery on tulle, muslin or similar fabrics in various colours and designs. (*for window blinds.*) (*Communicated by Jean François Planus, jeune.*)	2510	5th Sept. 1867	Arthur Charles Henderson.
Improved apparatus for excluding dust from railway carriages. (*wire gauze blinds or screens.*)	2526	6th Sept. 1867	William Gaudly Creamer.
Fire guards and fire screens - - -	2589	13th Sept. 1867	Hermon Symons.
An improved map, blind, scene and picture roller -	2631	19th Sept. 1867	Philip Porter.
Construction of rollers for window blinds -	3002	25th Oct. 1867	Lawrence Stockman.
Venetian blinds - - - - (*Communicated by Pierre Théophile Berton.*)	3130	6th Nov. 1867	William Edward Gedge.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
WINDOW BLINDS, &c.—*continued.*			
Improvements in omnibuses and similar vehicles, and in apparatus in connection therewith, part of which improvements are also applicable to railway and other carriages. (*dust blind.*)	3178	11th Nov. 1867	William Thompson.
Instruments for joining blind cords and other cords.	3215	13th Nov. 1867	Ulysse Perrenoud-Würflein.
WINDOWS AND SASHES; WINDOW-FRAMES AND SHUTTERS.			
An improved apparatus for preventing wind-draughts and water from passing under doors, casements and similar places.	81	12th Jan. 1867	John Hoadly.
Improvements in the construction of window sashes and sash frames, and in the arrangement of roller blinds thereto.	273	31st Jan. 1867	Thomas Bullivant.
Window and shutter fastenings - - - -	328	6th Feb. 1867	David Barr. John Bloxham.
Improvements in opening, closing and securing windows, doors and shutters, which improvements are also applicable to the opening, closing and securing the port holes of ships, and in the machinery or apparatus employed therein.	432	16th Feb. 1867	James Carter.
A new or improved sash fastening - -	683	11th March 1867	Michael Cavanagh.
An improved mode of and means for producing pictures, designs, letters and other characters or figures upon glass, metal, wood and other materials. (*colouring glass for windows.*)	732	13th March 1867	Edward Lee.
Manufacture of iron outside venetian blinds - (*and shutters.*)	889	27th March 1867	Jean Marie Jomain.
An improved window latch or fastener - -	1106	13th April 1867	Reginald Samuel Mordaunt Vaughan. Arthur George Harston.
An improved mode of making windows in imitation of stained glass.	1120	15th April 1867	John William Breakell.
Raising and lowering revolving shutters - -	1480	18th May 1867	John Smith. John Lawson Ibbotson.
Fastenings for window sashes - - -	1660	6th June 1867	Benjamin Templar.
Wheel carriages and other vehicles - - - (*carriage window frames.*)	1681	7th June 1867	Joseph Offord.
Improvements in apparatus for securing cords and straps such as are used for raising and lowering window blinds, ventilators, carriage windows and for other similar purposes - - -	1696	8th June 1867	Robert Edward Pepys. James Warburton.
Improvements in securing and adjusting windows, blinds and shades, doors and shutters, and in the apparatus employed therefor.	1708	10th June 1867	Robert Logan.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
WINDOWS, &c.—*continued.*			
Closing of doors, windows and other such apertures with a spring, when necessary to close them by such means.	1790	19th June 1867	John Coppard.
A new revolving shutter or blind to be applied either inside or outside of houses or other buildings.	1953	4th July 1867	Thomas Welton.
Doors and windows and fastenings for the same -	2041	12th July 1867	RobertAlexander Kennedy
Fastenings for window sashes, casements, shutters, doors, port-hole lights and other similar objects.	2116	19th July 1867	John Rogers.
Pulleys for suspending window frames and for other like purposes.	2273	6th Aug. 1867	Frederick Ryland.
Apparatus for cleaning windows - - -	2304	10th Aug. 1867	George Warsop.
Improvements in window sash fasteners, which are also employed to sustain the window sashes in any desired position when the window is opened. (*Communicated by James Chase Butterworth.*)	2481	2nd Sept. 1867	EdwardKenworthyDutton.
Fastenings suitable for casement windows -	2486	2nd Sept. 1867	Henry Vallance.
An improved illuminating roof and roof pavement. (*Communicated by Thaddeus Hyatt.*)	2539	7th Sept. 1867	BenjaminFranklinStevens.
Supporting window sashes, shutters, doors and other similar structures.	2712	26th Sept. 1867	James Syme.
Improvements in the construction of railways and railway carriages, and in the means for propelling the said carriages. (*carriage windows.*) (*Communicated by Charles Thompson Harvey.*)	2896	15th Oct. 1867	William Robert Lake.
Improved means for closing doors or windows -	3111	5th Nov. 1867	Antoine Verdalle.
Details and fittings of windows, doors and other similar contrivances applied to buildings and other structures - - - - - -	3206	12th Nov. 1867	James Carter. Thomas Chalmers.
Certain improvements in the manufacture and construction of carriages, landaus and other similar vehicles. (*collapsing windows.*)	3600	18th Dec. 1867	Joseph Cockshoot, junior.
Improved apparatus for sliding the sash frames of windows and for sliding shutters.	3620	19th Dec. 1867	Benjamin Monson.
Carriages, railway trucks and other vehicles - (*lowering the windows.*)	3692	28th Dec. 1867	Richard Howarth.
Improvements in the construction of the sash frames and boxings of windows and shutters, and in the mode of hanging the sashes of windows.	3694	28th Dec. 1867	Edward Evans.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
WIRE-WORKING; WIRE-ROPES; TELEGRAPH CABLES.			
Improved machinery or apparatus for the manufacture of "lingoes" used in looms for weaving, also in the manufacture of other articles from wire requiring to be stamped or pressed and punched.	127	18th Jan. 1867	Edward James Smith.
Electric telegraph conductors and cables - - (*Communicated by John Montgomery Batchelder.*)	212	26th Jan. 1867	John Henry Johnson.
Improved apparatus for fastening or connecting the wires employed for transmitting electric signals on railway trains.	488	22nd Feb. 1867	Alice Isabel Lucan Gordon.
Insulators for telegraph wires - - - (*Communicated by David Brooks.*)	632	7th March 1867	George Davies.
Improvements in the construction of electric telegraph conductors and in the method of preparing the same, also in the machinery and in the application of certain other machinery and apparatus employed therein. (*covering wire.*)	694	11th March 1867	Donald Nicoll.
Improvements in iron and wire continuous fencing, and in the lapping machinery employed therein, and in the manufacture of guards and other description of wire work.	874	26th March 1867	Edward Owen Greening.
Improvements in apparatus for effecting the drawing, spinning, twisting and laying of hemp, flax, tow, worsted, wool, silk, cotton, china grass or other fibrous material, for the manufacture of yarn, thread, twine, cord or rope, which improvements are also applicable to the manufacture of cord or rope from iron or other metal wire.	938	29th March 1867	William Bywater.
An improved mode of coupling telegraph and other wires. (*Communicated by David McComb.*)	951	30th March 1867	James Jennings McComb.
Improvements in the insulation of subterranean electric telegraph wires, and in laying the same.	1022	5th April 1867	Thomas Beaumont Marshall.
Machinery for the manufacture and treatment of wire.	1049	8th April 1867	William Thomas Henley.
An improved method of and apparatus for galvanizing or tinning and zinking iron wire and other description of iron. (*Communicated by Emile Delacroix.*)	1169	22nd April 1867	William Edward Gedge.
An improved method of and apparatus for laying and protecting underground telegraphic wires.	1307	4th May 1867	Léon Delperdange.
Improvements in the manufacture or construction of gates and fences, part of which invention is applicable to straining wires and to other straining purposes - - - -	1667	6th June 1867	George Rich Turner. William Thomas Allen.
Manufacture of electric telegraphic conductors -	1770	17th June 1867	Matthew Gray.
Improvements in the manufacture of electrical telegraphic conductors and in the means or apparatus employed therein. (*coating wires.*)	1772	17th June 1867	Matthew Gray.
An improved method of protecting submarine cables when placed on board ship, from injury by design or from damage by accident, and for facilitating the paying of them out.	1856	26th June 1867	Matthew Fontaine Maury.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
WIRE-WORKING, &c.—*continued.*			
Improved machinery or apparatus to be employed in the manufacture of wire healds for looms for weaving.	1870	27th June 1867	James Gabbott.
Folding wire netting adapted for poultry, sheep and other fencing.	1891	28th June 1867	George Kennedy Geyelin.
Machinery for manufacturing cards for combing or carding fibrous materials. (*Communicated by Augustus Bisco Prouty.*)	2013	9th July 1867	William Robert Lake.
Insulators for telegraphic wires - - - (*use of paraffine.*) (*Communicated by David Brooks.*)	2192	29th July 1867	George Davies.
Improvements in submarine telegraph cables and in the mode of joining the same.	2241	2nd Aug. 1867	Thomas Allan.
Obtaining sulphuric acid from the refuse "pickle" or "liquor" used in wire and galvanizing works.	2259	5th Aug. 1867	William John Pughsley.
Certain new and useful improvements having reference to wire heddles for loom harness, and particularly the construction, manufacture and support of such. (*Partly communicated by John Ashworth.*)	2551	9th Sept. 1867	Darius Chase Brown.
Machinery for manufacturing "chenille" - (*arrangement of endless wire.*)	2590	13th Sept. 1867	Pierre Raymond Couchoud.
Manufacture of articles of jewellery - -	2594	13th Sept. 1867	Richard Lowe. John Taylor.
An improved mode of preparing iron for the manufacture of various articles where great strength and capability of resistance to tensile strain or torsion is required. (*for telegraphic wires.*) (*Communicated by Michel Pawlowitch Lwoff.*)	2865	11th Oct. 1867	William Edward Newton.
Improvements in the construction of telegraphic cables and in the apparatus for the manufacture thereof - - - -	2942	19th Oct. 1867	Alfred Fauvin Jaloureau. Charles Louis Lardy.
Improvements in the manufacture of circular webbing or gasket, applicable as packing for steam-engines, as covering for telegraph cables and other useful purposes, and in the machinery employed therein.	3046	29th Oct. 1867	Joseph Threlfall Carter.
Means and apparatus for covering wire with metal or other material.	3157	8th Nov. 1867	George West Royston Pigott.
An improved mode of protecting submarine cables when placed on board ship, from injury by design or from damage by accident, and for facilitating the paying of them out.	3390	29th Nov. 1867	Matthew Fontaine Maury.
Treatment of gutta-percha, indian-rubber, Honduras gum, and the other allied gums, for the production of a preparation or preparations applicable as a varnish, cement, paint, stain, water and air proof material, solid or elastic material and for other purposes. (*for insulating wires.*) (*Communicated by Daniel Reed.*)	3542	13th Dec. 1867	Edward Reed Sintzenich.
Improvements in the arrangement of electric telegraph and other wires and the apparatus employed or connected therewith, and in laying and supporting wires for telegraphic or other purposes.	3609	19th Dec. 1867	Lewis Matthews Becker.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
WOOD AND VENEERS; ARTIFICIAL WOOD.			
A new or improved compound material or substance to be used for binding books, for panelling, and for other purposes where strength and lightness are required. (*veneered millboard.*)	90	14th Jan. 1867	Frederick Brampton.
Ornamenting, printing, cutting, creasing, bending, embossing and manufacturing articles from wood and other materials.	155	22nd Jan. 1867	Edward Tomlinson.
Improved machinery for separating the fibres of woods into shreds suitable for converting into pulp for paper making, and also for stuffing and packing various useful articles.	287	1st Feb. 1867	Frederik Bauman.
Treating vegetable substances chiefly applicable to the manufacture of paper pulp and fibres. (*wood.*) (*Communicated by Benjamin Chew Tilghman.*)	385	11th Feb. 1867	William Edward Newton.
Machinery or apparatus for disintegrating wood and other similar fibrous substances.	477	21st Feb. 1867	William Riddell.
A novel method of cutting veneers - - (*Communicated by John Burns Wilson.*)	570	28th Feb. 1867	Alfred Vincent Newton.
Improvements in machinery for cutting, shaping and polishing mouldings and shapes of circular, oval or irregular curved forms in stone, wood or other materials, part of such improvements being applicable for veneering mouldings of similar forms.	604	4th March 1867	Robert Thompson.
An improved mode of and means for producing pictures, designs, letters and other characters or figures upon glass, metal, wood and other materials.	732	13th March 1867	Edward Lee.
Coverings for internal walls and surfaces - - (*veneers of wood.*)	983	2nd April 1867	Jost Mahler.
An improved machine for cutting scale-board, and for the manufacture of the scale-board or material cut by said machine into an improved fabric for structures generally. (*Communicated by John Kinney Mayo.*)	1051	8th April 1867	William Clark.
Machinery or apparatus for bending or forming wooden hoops.	1341	7th May 1867	Edmond Faucher.
Machinery or apparatus for working wood -	1366	9th May 1867	Samuel William Worssam, jun^{r}.
Bleaching textile materials or fibres, more especially wood pulp, for the manufacture of paper and pasteboard. (*Communicated by Jean Bernard Biron.*)	1403	11th May 1867	William Clark.
An improvement in preparing wood and adapting it as a substitute for leather - -	1564	27th May 1867	Robert Rowe Knott. John Jeyes.
An improved method of producing mosaic veneers (*Communicated by the American Mosaic Veneering Company.*)	1598	29th May 1867	Alfred Vincent Newton.
Preparation of pulp for the manufacture of paper - (*from wood.*) (*Communicated by Alexander Aussedot.*)	1752	15th June 1867	William Edward Newton.

Subject-matter of Patent.	Number of Patent.	Date.	Name of Patentee.
Wood, &c.—*continued.*			
Means and apparatus for ornamenting, printing, coloring, enamelling, staining, cutting, creasing, bending and manufacturing articles from wood and other materials.	2139	23rd July 1867	Edward Tomlinson.
Treating products obtained when operating on wood and other vegetable substances to obtain fibre therefrom. (*see* "Gas.")	2370	17th Aug. 1867	Frederick Burnett Houghton.
Presses for extracting liquid from hops, seeds and other substances. (*from woods.*)	2540	7th Sept. 1867	Hamilton Woods.
Means or apparatus employed in drilling, surfacing, cutting and ornamenting metal, wood and other substances. (*producing ovals.*)	2732	27th Sept. 1867	Frank Branscombe.
An improvement in the preparation of wood for increasing the sonorous quality and improving the tone of a piano, violin or other musical instrument to which the wood is to be applied in its construction. (*Communicated by William Henry May.*)	2904	16th Oct. 1867	William Edward Newton.
Treatment of gutta-percha, indian-rubber, Honduras gum, and the other allied gums, for the production of a preparation or preparations applicable as a varnish, cement, paint, stain, water and air-proof material, solid or elastic material and for other purposes. (*substitute for wood.*) (*Communicated by Daniel Reed.*)	3542	13th Dec. 1867	Edward Reed Sintzenich.
For Sawing Wood, *see* "Cutting." For Preserving Timber, *see* "Preserving Wood."			

LONDON:
Printed by George E. Eyre and William Spottiswoode,
Printers to the Queen's most Excellent Majesty.

Department of

No. .....

LIBRARY OF

Illinois Industrial Univ

CHAMPAIGN, ILL.

Books are not to be taken from the Library Room

UNIVERSITY OF ILLINOIS-URBANA
3 0112 105005430